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ABSTRACT

Intended for teachers and administrators of early childhood programs, this publication is designed as a guide for developing learning environments for children in prekindergarten through the second grade. The approach advocated is based on research and on teacher experience with the way the young child learns. Contents of the guide include discussions of (1) developmental characteristics of young children; (2) aspects of constructing a learning environment; (3) program planning; (4) art, communication skills, mathematics, motor development, music, social studies, and science activities in an integrated curriculum; and (5) resources for the teacher, including teaching aids, assessment tools, and curriculum and parenting bibliographies. Materials in each section of the guide are arranged in a sequential order to provide for program continuity through the early years of schooling. All basic areas of child development are considered in suggestions for planning the learning environment and interrelated curriculum activities. (Author/RH)

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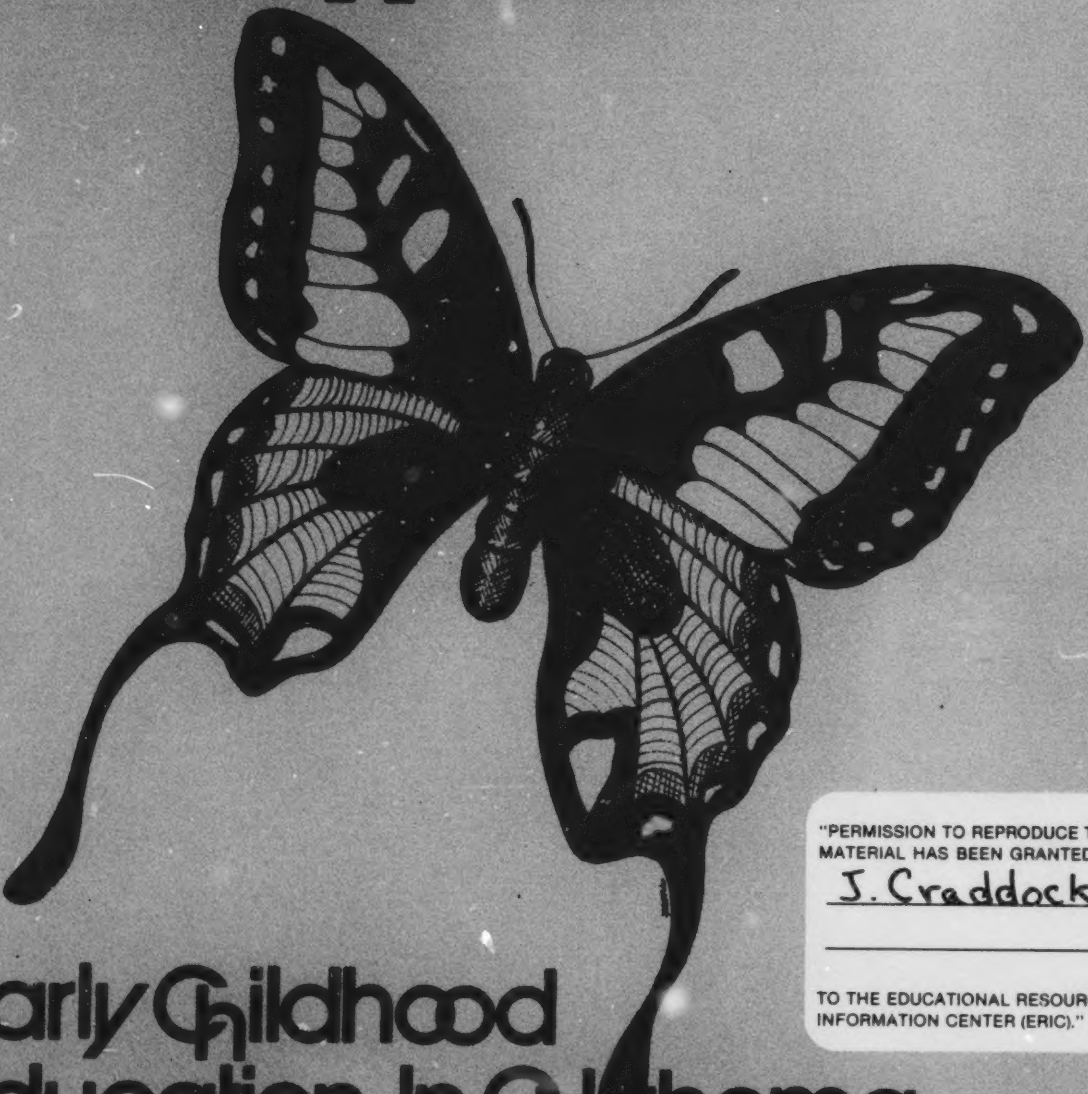

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Early Childhood Education In Oklahoma

Pre-Kindergarten Through 2nd Grade

Oklahoma State Department of Education

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Beginnings...

Early Childhood Education In Oklahoma

1907

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Foreword

Children's capacity and enthusiasm for learning during the early childhood years exceeds that of any comparable time in their life. It is the prime time for positive attitudes toward learning and school to begin.

Positive attitudes and individual success are inevitable when young children are exposed to a curriculum with a learning approach that is appropriate to their stage of development.

It is the goal of the Oklahoma State Department of Education that early childhood educators will provide this positive "beginning" and build a continuity within the grades that will grow from year to year.

We hope this publication will provide the stimulus for administrators and teachers to achieve these goals as they build foundations for learning and living.

Leslie Fisher

Leslie Fisher
State Superintendent
of Public Instruction

Preface

This publication has been developed for teachers and administrators of early childhood programs. It is designed as a resource for developing a creative learning environment that provides for continuity in the child's development in the prekindergarten through the second grade years.

The approach is based on research and teacher experience of the way the young child learns. Each section is arranged in a sequential order to provide for the development of the individual child and to provide for continuity of program through these important years. All areas of development are considered in the suggestions for planning the environment and the interrelated curriculum activities.

We hope these suggestions will serve as a springboard for new and creative ideas for curriculum that will meet the needs of your children and make learning a successful experience.

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Philosophy

The philosophy of Early Childhood Education in Oklahoma is directed toward being a part of a public school system whose goal is to develop healthy, stable citizens who can function as self-regulating, contributing members in a democratic society.

The goal of early childhood education is to allow young children to live and learn effectively [today] in a quality environment that meets their developmental needs. A strong today is the foundation for a strong tomorrow.

Every child has the right to an environment which fosters all aspects of development: physical, social, emotional, and cognitive; and provides the challenge and freedom to develop according to his/her individual growth pattern.

The environment encourages a positive self-concept, creativity, questioning, development of the thought process, and builds foundations for the basic skills of learning. The atmosphere of the environment promotes respect for self and others and gives each child opportunity for responsibility and self-direction.

Learning for young children occurs as they are exposed to, and involved in situations and activities in which they can learn for themselves. As children experience success and receive proper reinforcement, they are motivated to proceed in a learning continuum that promotes higher levels of learning and self-esteem.

Objectives

Early childhood programs should:

provide opportunities for a child to grow physically, emotionally, cognitively, and socially.

stimulate children to use their minds and bodies.

help children develop a positive feeling about themselves and their abilities.

give children an opportunity for creative growth.

help children recognize and accept feelings and learn appropriate ways to express feelings.

provide a setting which fosters self-expression and communication through the development of oral language.

develop problem-solving skills.

help children learn to make choices and take initiative in planning and doing things.

enable children to manage themselves, their materials, and routines of the day.

help children understand and live intelligently in their world.

encourage self-expression through art, music, movement, and dramatic play.

facilitate growth by providing the guidance, space, freedom, services, and equipment needed for each child to reach his/her potential.

help each child become a contributing member of the group.

provide adults who know how to help children stretch their minds, explore their world, and experience excitement in learning.

CHARACTERISTICS OF DEVELOPMENT 3 TO 4 YEARS OLD

COMMUNICATION SKILLS

Receptive Language

- Begins to understand sentences, involving time concepts (past, present)
- Can tell how common objects are used, i.e., "People sit in chairs "
- Understands relationships expressed by if..., then or because sentences
- Follows a 2 step direction
- Understands when told, "Let's pretend."
- Understands whether or not the child is a boy or girl
- Understands prepositions (on, under, in)

Expressive Language

- Will have a speaking vocabulary of approximately 250-900 words
- Talks in four to six word sentences
- Tells action in picture
- Says full name
- Can listen to a story five minutes in length
- Uses compound sentences
- Uses "s" on nouns to indicate plurals
- Uses "ed" on verbs to indicate past tense
- Refers to self using "I" and "me"
- Talks to self in monologue
- Can relate two events

Cognitive Development

- Knows own age; will show number of fingers before telling you
- Has short attention span
- Intentionally stacks blocks or rings in order of size
- Draws somewhat recognizable picture that is meaningful to child, if not to adult; can tell the adult about it
- Asks "how" and "why" questions; requires simple answers
- Repeats three numbers in order
- Recognizes and matches six colors
- Can identify and name circle, square, and triangle

MOTOR DEVELOPMENT

Gross

- Runs around obstacles
- Walks on a line
- Pedals a tricycle
- Hops on one foot with adult holding one hand
- Walks up and down stairs, alternating feet, with aid of handrail
- Uses slide without assistance
- Throws a ball with direction
- Catches large ball bounced to him/her
- Walks on tiptoe
- Sits with feet crossed at ankles
- Walks a balance beam holding adult hand
- Jumps from height of ten inches
- Turns a somersault with help

Fine

- Builds 3 block bridge
- Builds a tower of 9 small blocks
- Copies circle and cross
- Buttons and unbuttons large buttons
- Cuts with blunt scissors
- Drives nails and pegs
- Manipulates clay materials (ex. rolls, balls, snakes, cookies)
- Enjoys easel painting
- Holds crayons with fingers
- Uses paste
- Works puzzles with as many as seven pieces
- Can copy simple capital letters, like L, M, N, and O.

SOCIAL - PERSONAL

- Cleans up spills
- Washes and dries hands
- Uses toilet independently
- Answers telephone
- Joins in play with other children
- Beginning to share and take turns
- Begins dramatic play acting out whole scenes
- Enjoys talking to friends - children and adults
- Plays alone for short periods of time (15 to 20 minutes)
- Lack of ability to sympathize with others
- Forgets hurts quickly
- Needs reassurance from adults
- Has imaginary playmates
- Learns by observing and imitating adults and by adult instruction and explanation (also cognitive)

CHARACTERISTICS OF DEVELOPMENT 4 TO 5 YEARS OLD

COGNITIVE DEVELOPMENT

Points to and names four to six colors
Matches pictures of familiar objects
Draws a person with two to six recognizable parts

Draws, names, and describes recognizable picture
Counts and touches four or more objects
Knows home address and age
Has a longer attention span,Learns through observing and listening to adults as well as exploration; is easily distracted.
Has increased understanding of concepts of function, time (past, present, future), part/whole relationships
"Reads" pictures
Can tell what material objects are made of
Likes to finish activities
Interested in death
Can tell likenesses and differences in three out of six pictures

COMMUNICATIONS SKILLS

Receptive Language

Follows three unrelated commands in proper order
Understands comparatives like pretty, prettier, prettiest
Listens to long stories but often misinterprets the facts
Incorporates verbal directions into play activities
Learns to distinguish between fact and fantasy

Expressive Language

Tells tall tales, brags, compliments himself
Tattles, alibies, calls names
Asks when, how, why questions
Talks about causality by using because and so
Plays with words (creates own rhyming words)

MOTOR DEVELOPMENT

Gross

Walks up and down stairs (unassisted), alternating feet
Walks backward toe-heel
Turns somersault
Jumps forward without falling
Climbs ladder and trees
Gallops to music
Bounces large ball
Runs on tiptoe
May skip with one foot
Turns a somersault without help

Fine

Copies cross and square
Cuts on line continuously
Prints a few capital letters
Builds a tower of 10 or more blocks
Draws man with two parts
Adds 3 parts to incomplete man
Folds and creases paper 3 times
Draws and paints recognizable shapes
Puts on shoes and socks
Needs help tying shoes
Dresses self except for back openings

PERSONAL - SOCIAL

Likes to set and clear off table
Cleans up spills without help
Impatient in large groups
Plays and interacts with other children
Can talk well on telephone
Begins to understand property rights of others
Plays with 2-3 children
Can co-operate and take turns
Plays dress-up
Shows interest in sex differences
Sometimes fears monsters or other fantasies
Has nightmares

CHARACTERISTICS OF DEVELOPMENT 5 TO 6 YEARS OLD

COGNITIVE DEVELOPMENT

Is interested in clock and time
Attention span increases noticeably
Learns through adult instruction When interested, can ignore distraction
Understanding of "why" and future
Learns through play which is an imitation of adult's work
Can copy letters and numerals (may have reversals)
Can match pictures, colors, shapes, and words
Can stay with one activity for about twenty minutes
Considers school work as play
Can count to ten, but often uses fingers
Begins to identify money
Begins to understand the difference between real and pretend

COMMUNICATION SKILLS

Receptive Language

Demonstrates pre-academic skills
Curious about words
Can define simple words
Thinks in pictures
Believes adults can "hear" their thoughts
Difficulty understanding others because cannot understand another's point of view

Expressive Language

Grammar is fairly correct
By six, vocabulary 1500-2500 words
Can pronounce all letters, except maybe w, t, th, v, l, and z
Likes to talk and does so all the time

MOTOR DEVELOPMENT

Gross

Child's brain has reached approximately 90% of its adult size
Faster metabolism and heart rate cause child to tire less and recover energy quickly
Able to sit longer
Skips on alternate feet
Jumps rope
Catches a ball 5" in diameter
Moves from sitting to standing to squatting while playing
Likes to climb, jump, throw, and march
Better control over large muscles than small

Fine

Adult grasp of pencil
Cuts out simple shapes
Copies triangles
Traces diamonds
Copies first name
Prints numerals 1 to 5
Colors within lines

PERSONAL - SOCIAL

Engages with other children in group discussions and fair play
Plays simple table games
Chooses own friends
Likes adult company
Likes supervision
Likes to talk; talking is usually about self
Likes to anticipate special events, such as holidays
Enjoys slapstick humor
Will not admit to doing anything wrong; blames nearest person

CHARACTERISTICS OF DEVELOPMENT 6 TO 7 YEARS OLD

COGNITIVE DEVELOPMENT

Likes table games that are related to reading, math or language
Begins to make collections
Has trouble making decisions or choices
Works standing up
Thinks and reads out loud
Likes to see successes on a chart
Likes to be read to
Likes to read and "sound out" words
Likes to read material that relates to his or her own experiences
Can count to 100 by ones, fives, and tens
Recognizes and writes numbers to twenty
Likes to write numbers but may reverse some of them
Can add and subtract numbers to ten
Likes to put objects into groups or related classes
Sense of time and space developing

COMMUNICATION SKILLS

Receptive Language

Most sounds have now developed
Peak age for creativity - acts out anger with words
Capacity for reading and writing creative stories
Likes television
Will stutter occasionally because thinking is faster than ability to talk

Expressive Language

Begins to use language as a tool
Very talkative
Begins to "talk to" other children

MOTOR DEVELOPMENT

Gross

Very active, but often very clumsy
Likes to run, shove, push
Likes to build with large blocks, furniture, etc.
Enjoys balls of all sizes
Begins to ride bicycles, skateboards
Likes to walk curbs, tracks, etc.

Fine

Cuts well, paints, and pastes
Begins to use tools, likes to hammer
Begins to print well but may reverse letters
Likes to sew or lace
Vision is still not fully mature, may need finger to point to words

PERSONAL - SOCIAL

Loves and respects parents and teacher (frequently quotes each)
Likes to eat
Poor table manners
Can bathe with little help
Likes to make friends
Very emotional, will cry one minute and laugh the next
Brags a lot
Wants to know what is good and what is bad
Sense of honesty is weak
Likes to win and will cheat if necessary
May fear animals or adults who are going to get them

CHARACTERISTICS OF DEVELOPMENT 7 TO 8 YEARS OLD

COGNITIVE DEVELOPMENT

With good preschool experiences, will begin to love reading still. Likes to be read to
Will stay with learning activities for long periods of time
Ready for spelling and dictionary work
Writing is good and reversals should disappear
Understands money and its value
Can add and substract numbers to 20
Understands what "equals" means
Understands time, should be told how much longer activity can be continued
Begins to tell time
Understands years, seasons, months, days hours, minutes, old and young
Is ready for simple map work
Understands space. Can find way around community

Receptive & Expressive

Interested in word meanings
Begins to use slang
Likes riddles, jingles and corny jokes
Controls voice well. Can whisper, mutter and mumble
All sounds should be understandable
Begins to reverse order of sentences

MOTOR DEVELOPMENT

Gross

Likes to pitch, bat, and shoot basketball goals
Balances well on bicycle
May complain of muscle pains due to increased activity
Still much body movement, such as leaning back in chairs

Fine

Good printing and writing
May have trouble shifting eye position such as copying from chalkboard

PERSONAL - SOCIAL

Begins to be more realistic about self and more critical of self
Begins to think teachers and parents are more unfair
Often afraid of new situations
Wants to act and dress like the other children
Easier to manage because the child can see the other point of view
Likes clubhouses, tents, and treehouses
Likes to talk to friends socially, especially on telephone
Begins to want to play with child of the same sex
Can lose in a game without becoming so upset

Creating A Learning Environment

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CREATING A LEARNING ENVIRONMENT

The success of the Early Childhood Education Program depends on the total environment. This environment is affected by a variety of factors that include:

- physical structure
- room arrangement
- learning centers
- instructional materials
- behavioral development of the child
- planning
- scheduling
- relationship between:
  - teacher and child
  - teacher and parents
  - the children

Physical Structure

In a well-defined physical structure with flexible routines and explicit rules, children should be allowed to move freely, discover, execute, and organize.

Arrangement of Classroom

There is no single superior arrangement of a classroom. Any arrangement will be determined by the size and shape of the room, the amount and type of furniture and equipment, and by the program the teacher envisions as meeting the needs of young children. Furniture and equipment can be arranged to form a number of learning centers and/or interest centers structured around curriculum areas and interests of the child. If possible, the classroom should allow room for games, rhythms, and activities for large muscle development. If the room is small, this area may be provided by moving furniture or eliminating some tables and allowing for manipulative work - puzzles, pegs, games (according to skill development).

Learning Centers

Learning centers can be an integral part of the learning environment. The learning center has specific objectives set by the teacher and children. The center allows children to come to the center as an individual or small group for one of two purposes: practicing skills which have been introduced by the teacher, or exploring an interest by working through learning activities related to the child's interest and developmental level.

INTEREST CENTERS

There should be a variety of interest centers within each classroom. The introduction and content of each interest center should depend on the needs and interests of the children.

The following list provides examples of possible interest centers and materials which could be utilized within each center:

Language Center - Games and activities in this center will encourage self-direction to master language skills. Possible materials: alphabet letters, puzzles, games (bingo, lotto, etc.), board games, chalkboards, chalk, crayons, pencils, and paper. Materials for making books should be made available so that children can dictate or write their own stories.

Listening Center - Listening skills and independence can be developed through utilizing headsets with tape recorder or phonograph.

Math Center - Manipulation of concrete materials is necessary in the development of mathematical concepts. Possible materials: cuisennaire rods, shape games, sets and numeral games, flannel board numerals and sets, number puzzles, wooden numerals, magnetic board and numerals, and counting sticks.

Science Center - This center will change throughout the year and may include objects to be observed and experiments to be tried. Possible materials: aquarium, terrarium, animals, magnets, scales, magnifying glasses, plants, incubator, and thermometer.

Manipulative Materials Center - Materials in this center will aid in the development of concept formation, fine motor control, and perceptual-motor skills. Possible materials: puzzles, lego, Tinkertoys, pegboards, Lincoln Logs, snowflakes, building materials, small blocks, parquetry blocks and pattern cards, and colored beads and pattern cards.

Art Center - This center allows for creative expression in conjunction with the development of fine motor skills, eye-hand coordination, and independence in working. Possible materials: newsprint, fingerpaints, easel paint and brushes, clay, construction paper, glue and paste, scrap materials, and scissors.

Block Center - Motor control, visual discrimination, dramatic play, and creativity are developed by building structures with blocks. Possible materials: large hollow wooden blocks, solid unit blocks, farm animals, cars and trucks, and family figures.

Home Center - The home center is an area for dramatic play, and acting out roles of family and community. Possible materials: child-sized furniture (table, chairs, stove, sink, doll bed, refigerator, mirror), telephone, dishes and cooking utensils, dolls, dress-up clothes, costumes and props.

Library Center - This center should encourage an interest in reading books. Possible materials: books correlated to unit of study, story and picture books, child-authored books, pillows, rocker, beanbag chair.

Sand/Water Center - Activities will allow for the development of motor skills, perceptual problem-solving, and creative expression. Possible materials: water, sand, rice, measuring cups, spoons, utensils, bowls.

Woodworking Center - Activities will allow for the development of motor skills, perceptual skills, and creative expression. Possible materials: workbench, saw, hammers, wood, nails, glue, paint, brushes.

Cooking Center - Items such as electric skillet, and roaster, hot plate, popcorn popper, cooking utensils, and children's recipes will provide for ease in using this center.

Music Center - Motor control, auditory discrimination, dramatic play, and creative movement are handled by rhythm band. Instruments: xylophone, melody bells, color-coded piano, and record player.

Examples of skill development centers

- language arts
- math
- creative writing
- science
- art

Examples of interest centers

- post office
- barber shop
- grocery store
- beauty shop
- Christmas center
- hospital

What Goes in a Center?

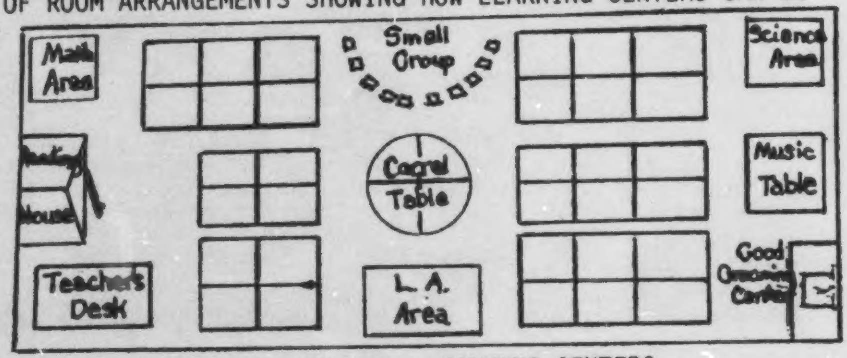
The Skill Development Center will at different times include a variety of materials: games (teacher-made or commercial), records, tapes, flannel board materials, filmstrips, books, different kinds of activities using different senses (auditory, visual, kinesthetic). The interest center may come from a focus of study in the class or an interest expressed by children, i.e., horses. For an interest center on horses, materials related to horses would be placed in the center: books (of various reading levels), filmstrips, pictures to classify, or identify, story starters for creative writing, math problems related to horses using sets of play horses, records about horses, modeling clay to shape horses, paint or crayons, and famous art prints showing horses. Not all activities would be placed in the center at the same time. Many basic skills can be integrated into the interest centers.

Where Are the Centers?

The teacher's imagination is the only limit. Centers may be located on the following: a table, a small rug, a corner of the classroom, etc. It is important to position quiet centers away from active centers.

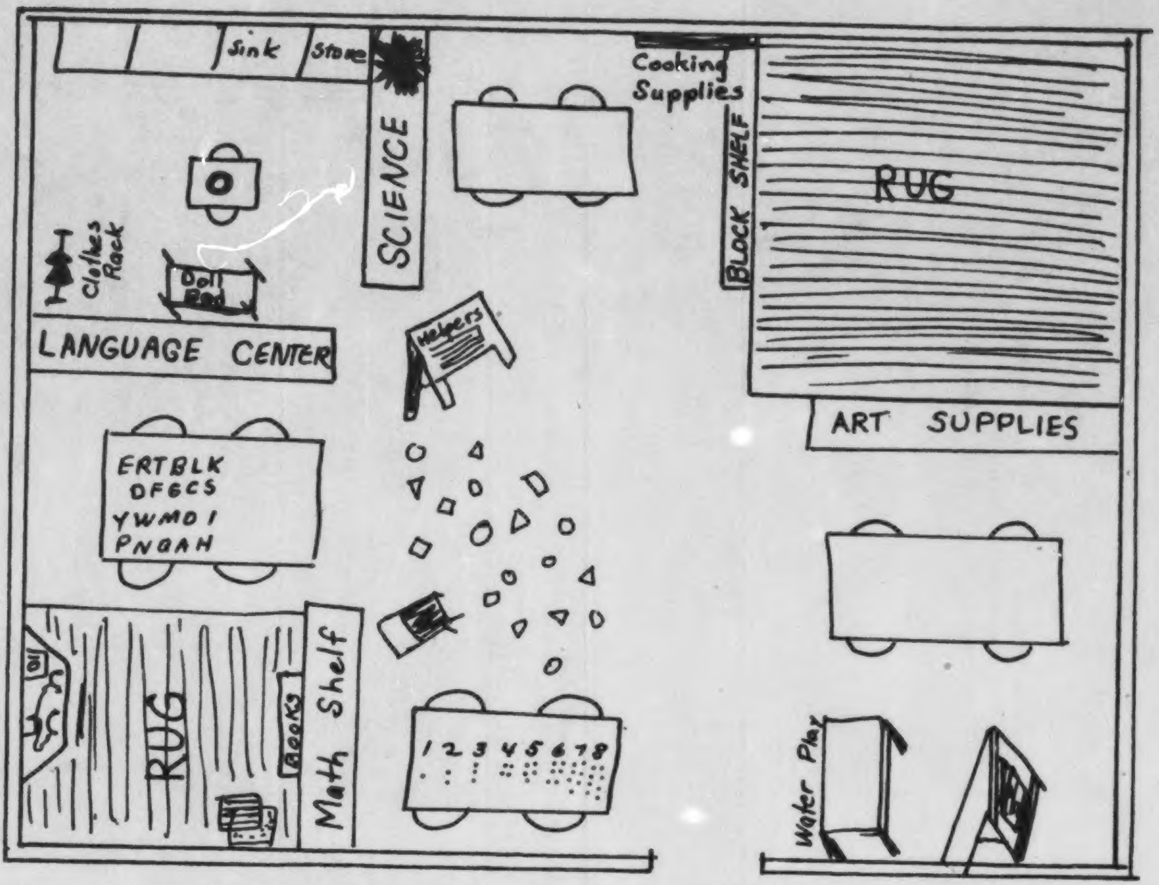
Centers will be changed according to the interest level and achievement of goals by students. Some classrooms are set up with learning centers in each curriculum area.

EXAMPLES OF ROOM ARRANGEMENTS SHOWING HOW LEARNING CENTERS CAN BE DESIGNED:

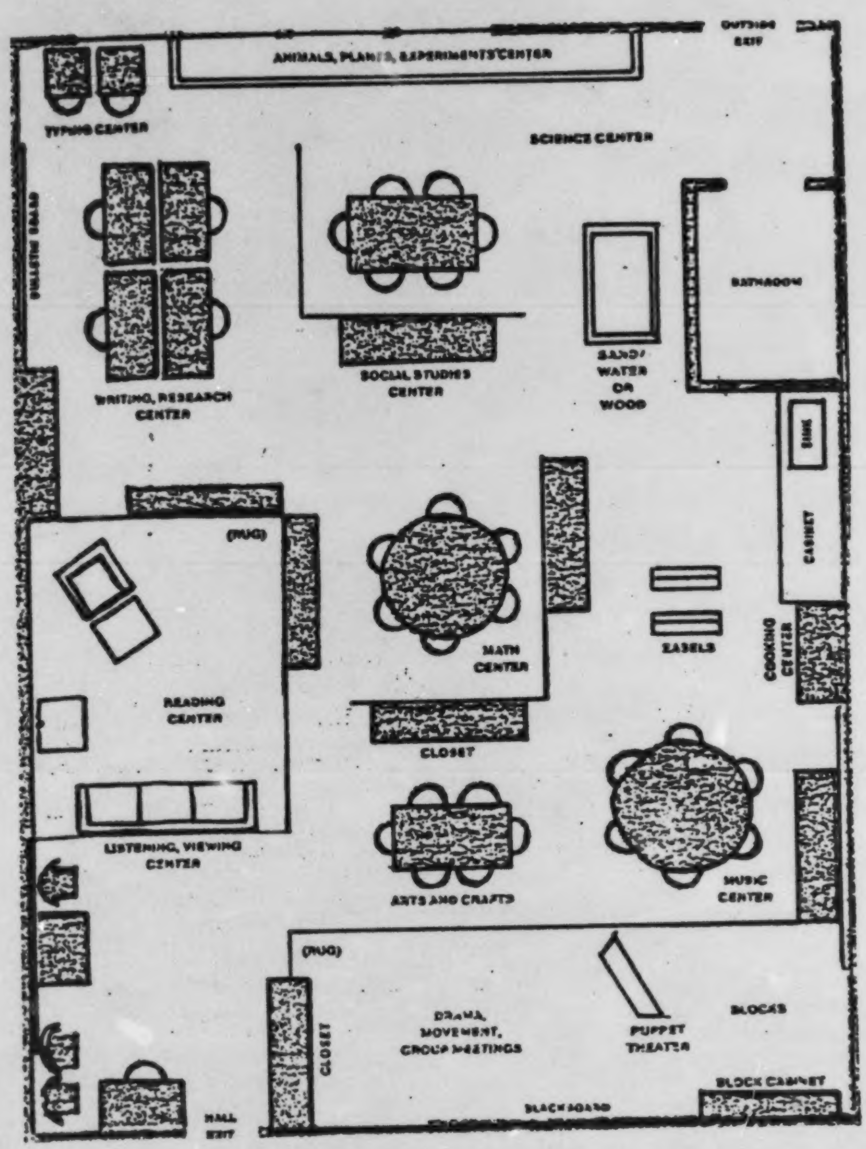


CLASSROOM WITH MULTIPLE LEARNING CENTERS

CLASSROOM WITH MULTIPLE LEARNING CENTERS


Sink
Stove
SCIENCE
Cooking Supplies
BLOCK SHELF
RUG
Clothes Rack
Doll Bed
LANGUAGE CENTER
Helpers
ART SUPPLIES
ERTBLK
DFGCS
YWMDI
PNQAH
1 2 3 4 5 6 7 8
RUG
Books
Math Shelf
Water Play

Furniture and equipment are arranged to form a number of learning centers structured around common learning experiences. The centers are defined, focused, and changed through the arrangement of tables, chairs, play equipment, graphic and other curricular materials. This permits small group interaction.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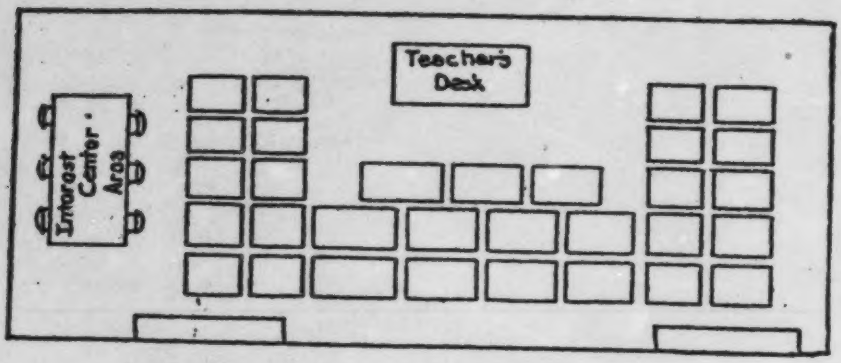
OUTSIDE EXIT
TYPING CENTER
SCIENCE CENTER
BULLETIN BOARD
BATHROOM
WRITING, RESEARCH CENTER
SOCIAL STUDIES CENTER
SAND/ WATER OR WOOD
SINK
CABINET
(RUG)
MATH CENTER
EASELS
COOKING CENTER
READING CENTER
CLOSET
LISTENING, VIEWING CENTER
ARTS AND CRAFTS
MUSIC CENTER
(RUG)
CLOSET
DRAMA, MOVEMENT, GROUP MEETINGS
PUPPET THEATER
BLOCKS
BLOCK CABINET
BLACKBOARD
HALL EXIT

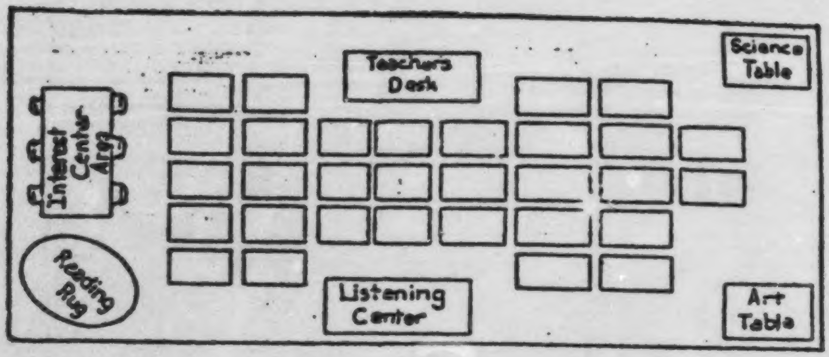
CLASSROOM WITH CENTERS BEING USED THROUGHOUT THE DAY

If you have never used learning centers, you might start with one like this:


Teacher's Desk
Interest Center Area

CLASSROOM WITH ONE LEARNING CENTER

Then you can add other centers:


Teachers Desk
Science Table
Interest Center Area
Reading Rug
Listening Center
Art Table

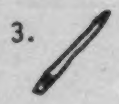
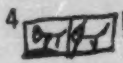
CLASSROOM WITH SEVERAL LEARNING CENTERS

Tips for Using Centers:

INTRODUCING CENTERS

Always introduce the activities to the children, either in total group planning time or small group time. Rules for games can be modeled by the teacher at this time. The introduction of the activities at a center includes: expected behaviors, outcomes, and choices for activities. At the beginning of a center, there may be only one or two activities. Later, more may be added. After the initial verbal introduction of the center activities, care of equipment, and clean-up procedures, written instructions or pictorial repesentations may be placed on varying sizes of papers or charts at each center.

You may choose:

1. pictures of animals for your animal book
2. drawing your favorite animal
3.  copying the names of your favorite animal
4.  playing animal lotto

Remember the animals we saw at the zoo?

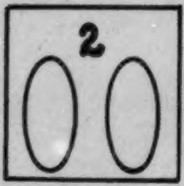
- Choose one animal.
- Make a picture of it.
- You may use:
  paints
  chalks
  marking pens
  large or small paper
- When you finish, you may play an animal game; write a story about animals; read an animal story.

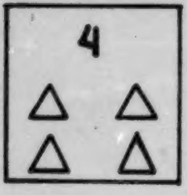
The above charts are examples of ways to remind children of their choices at a particular center. These charts illustrate possible extensions of a study trip to the zoo for children of different age levels.

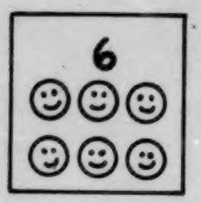
LIMIT THE NUMBER OF CHILDREN AT EACH CENTER

Population cards - To help children determine how many work in a center, a population card can be used. The population card is made by placing a numeral on top of the card and a corresponding set of objects underneath the numeral. This population card should be large enough to be easily recognized and read.

EXAMPLES OF POPULATION CARDS ARE BELOW:

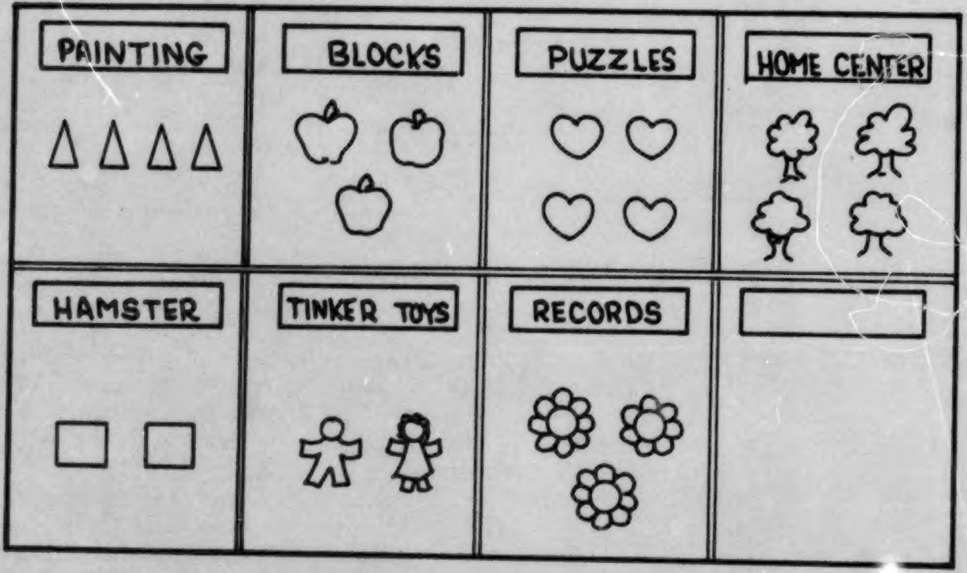






The population card is placed in the appropriate center. From the first day the interest center is open, it is explained to each child using the center that only this number may be there at one time. With repetition, this concept becomes a habit which helps children develop self-control and responsibility.

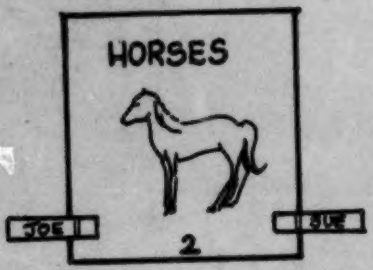
Central Planning Board - Another way to help children remember how many may work in a center is the central planning board. Begin with a pegboard 4' x 5'. The board can be easily divided into sections by using masking or colored tape. Labels or pictorial representations for each of the centers can be taped in the squares. The teacher places a certain number of hooks with seasonal symbols or shapes on each hook. She explains to the children that only this number of children may be there at one time. It is important that the planning board be placed at the children's eye level so that they can see it easily.

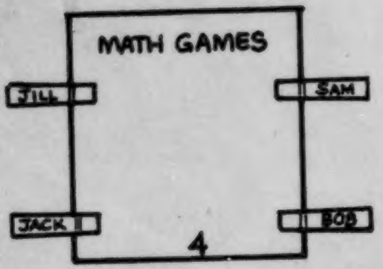


The picture above is one example of a Central Planning Board.

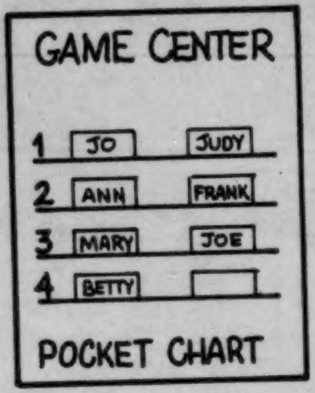
Tips for Using Centers:

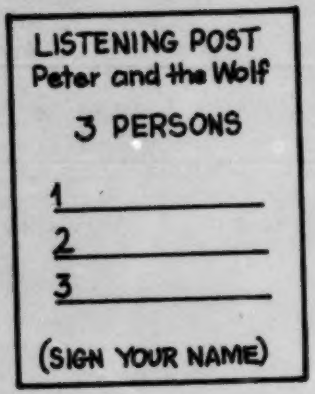
Examples of other ways to limit the number of children working in centers:

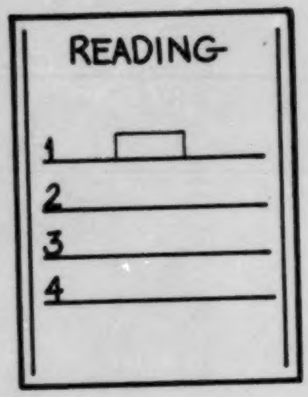

HORSES
JOE
SUE
2


MATH GAMES
JILL
SAM
JACK
BOB
4

In the above illustrations, clothespins with the children's names are clipped to the population board while the child is working at a center. The number of children working at the center will correspond to the numeral on the board.


GAME CENTER
1 JO JUDY
2 ANN FRANK
3 MARY JOE
4 BETTY
POCKET CHART


LISTENING POST
Peter and the Wolf
3 PERSONS
1
2
3
(SIGN YOUR NAME)


READING
1
2
3
4

Coding

To help children develop responsibilities for materials and equipment, coding is used to designate a specific place for each piece of equipment. To code, two shapes are cut from colored tape or contact paper. One is placed on the shelf and one on the piece of equipment. It is important for coding to be neat and precise for easy recognition. A different color might be used for coding each center, for example, red for math materials, blue for language, etc. Careful coding encourages children to match the shapes by color and design when putting equipment away after use.

Instructional Materials

Instructional materials included in the early childhood program should consider the characteristics and needs of the children. The instructional materials included in the program are:

- manipulative materials
- concrete materials
- materials which are diversified in terms of level of difficulty
- media resources
- materials that supply individualized problem-solving experiences

Materials should be stored in low, open shelves so the children have access to those needed for work so they can assume responsibility for proper use and care of equipment and materials.

Behavioral Development of the Child

The environment should allow for the behavioral development of the young child.

Children are:

Active - provide room for climbing apparatus, blocks, boards, ladders, creative movement exercises, and outdoor play.

Sociable - provide room for small and large groups and opportunities for children to interact.

Introspective - provide room for quiet areas such as a library center, barrel, or box.

Expressive - provide an area for easels, fingerpainting, crayons, scissors, paste, clay, paper, etc.

Curious - provide opportunities to observe, explore, construct, experiment, problem-solve, and verbalize.

Important - encourage a positive sense of self. Displaying a child's work at the child's eye-level will help to develop a sense of accomplishment. Provide many opportunities for the child to become a leader in the classroom. Foster leadership and responsibility through class and group leaders, being in charge of specific tasks: milk, snacks, clean up, line leaders, etc.

WHAT IS THE RELATIONSHIP BETWEEN THE TEACHER AND CHILD?

What is the Relationship Between the Teacher and Child?

The relationship between the teacher and child depends on the following teacher interaction skills:

1. Acceptance
2. Reinforcement
3. Individualization
4. Modeling
5. Planning and evaluation

What Does Acceptance Mean?

Acceptance of a child means acceptance of his/her language, family, and culture. The teacher's ability to accept a child and his/her individuality is shown in the teacher's ability to arrange an environment that is accepting of each child. The environment would include the child's language, activities related to home, and activities related to the neighborhood.

A truly accepting teacher will respect a child's individuality. Some responses may include:

- giving the child some choice in what he/she is doing; e.g., what he writes about, what he reads, the picture he paints;
- listening to a child;
- accepting a child as a person;
- seeking the child's opinion;
- setting of limits with the child and for the child;
- giving the child responsibility for self and others;
- planning and evaluating with the child.

What is Reinforcement?

How a teacher responds to a child acts as a reward or punishment whether either is aware of it or not. Consequences which reward behavior are said to reinforce and will cause a repetition of the behavior.

Criteria for reinforcement should be:

1. Specific
2. Sincere
3. Frequent
4. Directed towards the behavior rather than to the child as a person; "I like the many illustrations you used in making your book."

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Some specific reinforcement techniques:

- touching a child in a reassuring, supportive manner;
- giving specific verbal praise for a specific act;
- listening closely to a child and allowing him/her to talk;
- employing what the child suggests;
- displaying a child's work;
- saying something comforting. If a child says, "My daddy is out of work," the teacher might respond, "Maybe there will be more work soon. I hope so."
- using eye contact and facial clues;
- deflecting questions: "What do you think, Jim?" when another child asks a question. This implies you need Jim's help, shows you have valued help he has given in the past, and turn to him for help now.
- recalling a point. "As Jim said earlier . . . ."

What Does Individualization Mean?

Teaching is interaction; interaction with children so that individual differences of children are recognized and provided for.

A teacher can recognize individual differences by:

- listening to children;
- listening for clues;
- recording behavior: both children and adults can be involved in record keeping;
- planning from records.

When providing for individual differences, the teacher should consider:

- past experiences of the children;
- interests of the children;
- styles of learning (tactile, oral, sight, phonetic);
- levels of operation (manipulative, transitional, abstract).

Verbal and physical responses to the child should indicate:

- "You count!"
- "You count as an individual."
- "You can succeed."
- "You have succeeded."
- "I like the way you are."
- "You don't have to be a carbon copy of the other children."
- "YOU ARE AN IMPORTANT PERSON."

What is Modeling?

Modeling is the teacher's verbal and physical interactions with children that provide an important model for children.

Steps in the process of modeling:

1. Establish rapport with the child.
2. Determine what is to be modeled.
3. Model the behavior in interaction with the child.
4. Reinforce the child's behavior as it occurs.

A teacher can model:

1. Language
2. Intellectual skills (observation, comparison, recall, use of alternatives)
3. Enthusiasm for learning
4. Art and skills used throughout life (reading, writing, math skills, and democratic values)

Planning and Evaluation?

Planning and evaluation are essential and continuous processes of the classroom day. The two levels of planning and evaluation are dependent upon the others:

1. Adult level
2. Child level

Outcomes of the teacher's planning depend upon the values a teacher has about acceptance, reinforcement, individualization, and modeling. A teacher involved in the planning and evaluation cycle is centered on children. He/she should focus attention on:

1. Children's interactions with children.
2. Children's interactions with adults.
3. Children's interactions with materials.

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Planning For Learning

CASE
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PLANNING

Planning is a significant part of teaching and learning. It will provide direction, insure the inclusion of important experiences, and the development of sequential activities to meet the learning needs of young children.

A variety of approaches for planning activities may be used. One approach is to define general goals for the school year and then prepare for specific understandings and activities. Many teachers utilize the school calendar to list tentative weekly themes, concepts, and skills they intend to include in planning. The optimum time to introduce a theme or concept will depend on the interests and developmental levels of the children within each particular class.

Another approach is to look at the interest centers in the room and identify activities and materials which may be planned for each area. The choice of activities is based on the children's interests and level of development. It is important to plan a broad range of activities in order to provide many choices within the children's interests.

The teacher determines the desired accomplishments of the week, what information is to be presented to the class, and the materials and equipment needed to carry out the plans. All materials should be organized and available for use (books, songs and records, poems, fingerplays).

A daily schedule is valuable because it provides the basic structure of the day. Consistency of this schedule enables children to feel secure and free to explore the environment. Although consistency is important, flexibility is essential. Teachers must be concerned primarily with the process of successful learning in young children.

Evaluation by the teacher should include observation of the children as they work and play, contributions of the children, and levels of interest. Written comments may indicate the need to modify plans to continue successful activities or discontinue ones that did not work.

In the beginning, short blocks of time might be planned for group activities. Teachers should alternate these times to create a smooth, flowing day. Active and quiet times are also alternated to help children pace themselves. As the year progresses, the interest center times become the major portions of the day.

When planning, it is imperative to remember "a thinking, talking classroom does not emerge from a rigid atmosphere." *(Tulsa Public Schools)

*From page 43, Kindergarten for the 80's: A Creative Learning Environment. Used with permission of the Tulsa Public Schools, Box 45208. Tulsa, Oklahoma, 74145.

COOPERATIVE PLANNING

A healthy classroom environment necessitates planning with children.

When planning with children, a need for information must be established before it will be sought, used, or incorporated. Very early in the school year children can define and discuss common problems and offer reasonable solutions to these problems. For example, whose responsibility is it when a child loses a coat on the way home from school, or forgets a bus ticket? To take children's problems out of their hands implies a lack of faith in their capacity to handle their own affairs. Problem-solving discussions provide clues to confusions, accuracies, and individual readiness. These experiences not only yield knowledge of a child's accuracies and individual readiness, they also indicate when to expand learning. Fresh ideas are introduced and can be further explored by determining what the children know and what they would like to know. Educational purposes are better achieved when they are adapted to the child's purpose and many hidden learnings will accompany the main lesson.

Planning with children may be incorporated:

--intermittently throughout the day
--daily
--weekly
--monthly
--seasonally
--yearly

Children should be provided opportunities for contributions related to:

--goals
--objectives
--procedures
--rules
--discipline
--centers
--unit topics
--field trips
--resources
--scheduling
--evaluations

Questions that teachers might ask to get children involved in planning must be formulated in accordance with the developmental level of the children and with the area being planned. Cooperative planning time becomes a "springboard" for discussion for all involved. Each child should be given an opportunity to contribute. Those who tend to withdraw from responding in group situations should be encouraged to respond.

Some sample questions that might be asked are as follows:

1. "What would you like to learn about _______?" (a pre-planned unit topic)
2. "Who knows where we could go to learn more about _______?" (planning a field trip)
3. "How do you feel about the way you have worked today?" (goals or procedures or discipline)
4. "What part of the day do you like best? Why?" (scheduling)
5. "What would you like to work on at the _______ center next week?" (centers)

Each child who responds must feel secure that his/her contribution is worthwhile. His/her self-image is of major importance to his/her feelings of success.

*"Cooperative planning means that the teacher and children plan together, examine alternatives, and make decisions appropriate for consideration by the child. . . Cooperative planning does not mean the teacher already has the plan in mind and is trying to have the children guess what it is or to manipulate them into making correct choices."

Cooperative planning provides an opportunity for students to experience an environment they have helped shape. It is, in actuality, part theirs. Cooperative planning can serve as an influential tool for fostering the students' growth in problem-solving skills, independence, and the development of self-esteem. In an early childhood education program, cooperative planning is a pivotal necessity.

*Good Schools for Young Children, Sarah Hammond Leeper, Dora Sikes Skipper, Ralph L. Witherspoon. 4th Edition. Macmillan Publishing Company, Inc., New York. Used with permission of the publisher. All rights reserved.

SCHEDULING

The work or activity time, where children experiment with learning materials and utilize self-direction skills, is a significant part of each day. This period should be long enough to allow completion of work activities and to foster the development of responsibility in the care and function of the classroom. Large group times can be utilized for planning with children and providing "relevant" information. Instruction is most effective in small groups with the teacher acting as a facilitator in the learning process. The following criteria should be used in determining a schedule:

1. Blocks of time which include group time activities, work or activity time, creative movement and rhythms, quiet times, games or outside play
2. A balance between teacher-directed and child-initiated types of activities
3. A balance between active and quiet experiences
4. Time for individual work and time for children to be together in groups
5. The developmental level and experiences of the children
6. The interests of the children
7. The materials available in the classroom

FOUR-YEAR-OLD SCHEDULE

A.M.		P.M.
8:45- 9:15 30 min.	Free play Centers or outdoor play Gross motor development	12:15-12:45
9:15- 9:30 15 min.	Group time Greetings Calendar activities Plans for day Stand-up activities	12:45- 1:00 1:00- 1:50 Work time
9:30- 9:40 10 min.	Snack time	1:50- 2:00 Snack time
9:40-10:30 50 min.	Work time (centers) Art activities Table games Dramatization center Blocks Manipulations Water play	
10:30-10:50 20 min.	Group time Music, rhythms Games	2:00- 2:20
10:50-11:15 25 min.	Story time Dramatization Prepare for dismissal Dismissal	2:30- 2:45

FOUR-YEAR-OLD
Extended Day Schedule
9:00 a.m. - 3:00 p.m.

MORNING SESSION	ACTIVITIES
Arrival 9:00 a.m.	Free play or outdoor play (Special attention to individual children)
9:00 - 9:15 a.m.	Snack time Conversation Socialization
9:15 - 9:30 a.m.	Group Time Greetings Plans for the day Introduce new games Activities Stand-up activities
9:30 - 10:30 a.m.	Work Time - (centers) Art activities Table games Housekeeping center Blocks Manipulatives Water play Sand table
10:30 - 10:45 a.m.	Music, rhythms, records
10:45 - 11:15 a.m.	Outdoor play
11:15 - 11:30 a.m.	Story time Fingerplays Dramatization
11:30	Dismissal for those leaving
11:30 - 11:45 a.m.	Getting ready for lunch Bathroom Wash hands

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SCHEDULES

AFTERNOON SESSION	ACTIVITIES
11:45 - 12:15 p.m.	Lunch
12:15 - 1:30 p.m.	Rest time Children should not have to go to sleep. If possible, they should rest in small groups. Provisions should be made for those who wake-up early and for those who sleep longer.
1:30 - 1:45 p.m.	Afternoon snack time Conversation Socialization
1:45 - 2:30 p.m.	Work time Indoors and/or outdoors
2:30 - 2:50 p.m.	Story time Fingerplays Dramatization
2:50 - 3:00 p.m.	Prepare for dismissal Coats and Bulletins Review the Day

KINDERGARTEN

DAILY SCHEDULE

Arrival 8:45 a.m.	Conversation/sharing time or mini work time
9:00 - 9:15 a.m.	Group time Greeting songs Flag salute (pledge and song) Calendar Stand-up activity
9:15 - 9:30 a.m.	First work time - (centers) Explanation of new activities
9:30 - 10:00 a.m.	Work Clean-up Evaluation
	Rhythms, music, games
10:00 - 10:15 a.m.	Second work time - (centers) Work Clean-up Evaluation
10:15 - 10:30 a.m.	Rhythms, music, games
10:30 - 11:00 a.m.	Second work time - (centers) Work Clean-up Evaluation
11:00 - 11:20 a.m.	Story time Poems Fingerplays Dramatizations
11:20 - 11:30 a.m.	Prepare for dismissal Collect work/bulletins Get wraps

First work time might include utilization of an art center, math center, listening center, language center, or science center.

Second work time might include utilization of block center, home center, manipulative materials center, large motor center, or outside play.

SCHEDULES

DEVELOPMENTAL AGES 6-7

TIME BLOCKS	TASKS
Morning:	
10 min.	Conversation/Sharing
5 min.	Clerical (Lunch Count/Attendance, etc.)
15 min.	Task Orientation/Planning with Students
90 min.	Formal Work Time: --Language Arts (Listening, Speaking, Reading, Literature, Library) --Transition --Movement Education (Physical Education, Fingerplays, Games) --Transition --Mathematics/Science --Transition --Aesthetic Arts (Art/Dance/Drama/Music/Library) --Transition --Social Studies
Flexible	RECESS/BREAKS
30 min.	Informal Work Time: Student: Individually Selected Activities: --Interest Centers --Educational Games, Manipulatives, Reinforcing Motor Skills, Language Skills, Mathematic Skills, Inquiry Skills, etc. --Conversation/Sharing Teacher: Individually Selected Activities: --Interest Centers --Literature Enrichment (Reading Stories, etc.) --Individualized Instruction (Reading, Mathematics, Folders, Readiness, etc.), Conferencing with students
Flexible	LUNCH BREAK/RECESS

Afternoon:

5 min.	Clerical (Attendance, etc.)
10 min.	Task Orientation/Planning with Students
90 min.	Formal Work Time: --Language Arts (Listening, Speaking, Reading, Writing, Literature, Library) --Transition --Movement Education (Physical Education, Fingerplays, Games) --Transition --Mathematics/Science --Transition --Aesthetic Arts (Art/Dance/Drama/Music/Library) --Transition --Social Studies
Flexible	RECESS/BREAKS
30 min.	Informal Work Time: Student: Individually Selected Activities: --Interest Centers --Educational Games and Manipulatives Reinforcing Motor Skills, Language Skills, Mathematic Skills, Inquiry Skills, etc. --Conversation/Sharing Teacher: Individually Selected Activities: --Interest Centers --Literature Enrichment (Reading Stories, etc.) --Individual Instruction (Reading, Mathematics, Folders, Readiness, etc.)
5 min.	Summation of the Day's Tasks
5 min.	Conversation/Sharing
5 min.	Distribution of Notes/Dismissal

THE FIRST DAY OF SCHOOL

During the days before the children arrive, the teacher must set the stage. The room must be prepared so that, by its appearance and atmosphere, it is comfortable and inviting. Use pictures and materials that are familiar to the children, plants and animals; also, make a room more inviting for young children.

There should be a locker or cubby hole for each child in which to put belongings while at school. The locker should be marked in some way for the children to easily identify their own. (Stickers, pictures, snap shots, or names of the children can be used.)

It is advisable to have a helper (aide, intern teacher, parent) the first day of school. This helper can be outside the door with name tags for the children and offering assistance to the parents and day care centers. The name tags should be put on the children as they enter the room so they can be greeted with their names by the teacher. The name tags can be made into different shapes so that children can be grouped quickly for first day activities.

After all children have assembled, they will enjoy some finger plays or action poems. Discuss with the children the importance of rules and let the children help make them, beginning the very first day. Children are more willing and interested in following rules if they have had a part in making them. Keep the list of rules as short as possible.

A tour of the room should be taken and the various centers should be pointed out. Only equipment which will be used should be visible, as it is very frustrating to a child to see materials which he/she is not allowed to use. Have some of these materials available on tables or low shelves: beads for stringing, pegs and pegboards, simple puzzles, good picture books, manipulative toys, newsprint and crayons.

To help children learn the proper care of materials, work centers and learning centers should be introduced one at a time. Color coding the shelves (matching symbol on materials to a symbol on shelf), and using Population Cards in certain working areas can be helpful. Careful introduction of one activity at a time helps insure a smooth work period.

The school day should be alternated with various types of activities: games and rhythms, group discussions, music, work time, stories, records. A quiet activity should be followed by one involving movement. Children need to move from one activity to another in an orderly manner. Changes of activities may be accomplished by utilizing some of the following: fingerplays, songs or chants, activity poem or stand-up activities.

Toward the end of the school day the children need to be brought together to discuss what they have done. This evaluation with children is valuable in teacher-pupil planning. Ample time should be allowed for preparation to be dismissed.

Begin early to build common courtesies, attitudes, and behaviors by being consistent and applying a "common sense" approach. Remember that with every freedom goes a responsibility and that much teaching is done by precept and example.

The first week the child begins to learn how things are done in his/her classroom. The teacher realizes the need for self-control. The young child does not always respond to commands to "listen" or "move quietly." The teacher should encourage listening by providing interesting things to listen to, such as: fingerplays, poems, songs. She/he prevents restlessness by moving children about the room with activity poems. She/he uses special signals and a "talking piano."

A technique that cannot be underestimated is for all preparation to be made before the children arrive.

What is taught is important and how it is taught is important. The teacher of young children asks many questions. Many times the second question is determined by the answer to the first question. Such a procedure demands an alert, informed teacher.

Work time or activity time is the core of the program. The child should be allowed choice of activity, but he/she must also learn to take turns and complete a task. The child is not told to do something as much as he/she is given the opportunity to do something.

The teaching method for the young child is best described as work exposure. The experience is there. The child absorbs that for which he is ready. He is motivated; he is not pressured.

TRANSITION

Transitions from one activity to another are somewhat difficult for young children. Help from the teacher is often needed. A prearranged signal will be a time saver, avoid unnecessary verbalization, and focus the child's attention on the teacher's direction. The following signals might prove beneficial: a piano or triangle signal for "listen please," progressive tones played up or down the piano for "please stand up" and "please sit down."

The teacher can effectively use music for moving children from one activity to another. A singing voice can get attention when perhaps a speaking one cannot, so sing the children to new activities. A smooth transition can also be accomplished with "tiptoe" music, "move like a robot" or musical fingerplays.

Sitting down with a few children while beginning to read a book or playing a song on the piano will quickly bring the children to a new activity.

THE EXCEPTIONAL CHILD

In an early childhood class, there usually are some children with different, or exceptional abilities. The early childhood teacher needs to be able to recognize the qualities of behavior which are manifested by the exceptional child. Often it is the observation of the early childhood teacher which leads to the identification and initial assessment of the child with exceptional needs or abilities.

In planning the program for the exceptional child (which includes the gifted and/or talented child) teachers recognize that all children are more alike than different, possessing the same basic needs with additional needs in the area of exceptionality. Having exceptional children in the classroom provides an excellent opportunity to teach consideration, understanding, and acceptance of differences. The teacher serves as a model whose attitudes and actions are dominating influences.

The Gifted Child

The teacher should provide the gifted child challenges beyond those of the regular program. If the child shows interest in activities beyond that of the typical student, he should be guided to discovery. If there is interest in reading and writing, opportunity and assistance should be given. The curiosity and the desire to learn do not need to be motivated as much as they need to be nurtured. The open-ended kinds of activities and learning centers of a good early childhood classroom serve well the needs of the academically gifted student.

What about the child who comes to kindergarten who is able to read? Usually this child has learned to read by intense personal involvement in a stimulating environment. The setting of the kindergarten classroom should offer much opportunity for the child to use and extend skills. The library center will provide many kinds of reading material for the reading kindergarten student as well as material for the enjoyment of the student who is still reading pictures. Two children may enjoy a book, side by side, totally involved with the story, yet the level of skill development for each child is different. Because a child can read does not mean that reading is the most valuable activity for the child at this time in his life. Every child needs to develop socialization skills, to become self reliant, to develop decision-making abilities, to be able to work independently when it is appropriate. Each child needs to be able to select an activity, initiate and attend to a task to its completion, and to put away materials.

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Experience stories dictated by a child, a small group, or the entire class and written by the teacher, are good activities to meet the reading needs of the child who is reading as well as the child who is learning about reading. The story can be copied by those children who have developed fine motor capabilities and the interest to write. It is important that a young child does not develop vision problems by trying to use his/her eyes for tasks for which his/her body has not yet sufficiently matured.

The Visually or the Hearing-Impaired Child

Young children who have a hearing loss are often inconsistent in behavior. They may appear inattentive, may interrupt, and may not appear to understand. They may have speech problems and may tilt or turn their heads to listen. Children who do not see well may rub their eyes frequently, squint, or blink continuously. Often the parents of a child with vision or hearing loss is not aware of the handicap. A child with suspected problems in either area should be referred to the school nurse.

The Slow Learner

The slow learner often fails to follow simple directions, to pay attention, and to finish work. Usually he/she is dependent on the teacher. A kindergarten program based on the developmental needs of the child can provide the slow learner with something he/she can do with satisfaction.

EVALUATION

Evaluation is part of the learning process and involves the teacher, child, and parent. Evaluation should be continuous, diagnostic, and should measure progress toward broad goals as well as the attainment of specific skills.

The teacher should observe and record children's behavior and responses throughout the year. It is important to "know" each child in terms of his/her developmental level and be able to adequately relay this information to parents.

The following lists of skills are offered as a guide to help the teacher when developing evaluation reports for young children.

Social Skills/Work Habits:

Displays self-confidence
Participates in group

Activities - Art
Physical Education
Music

Demonstrates a positive attitude
Interacts with others
Respects rights of others
Accepts and follows rules
Shares and takes turns
Follows directions
Completes assigned tasks
Works well in: large group
small group
independently

Makes choices from interest centers
Able to make decisions

Physical Growth and Development:

Demonstrates basic gross motor skills:
    running, jumping, hopping, balancing, skipping, catching
Identifies body parts
Demonstrates fine motor coordinations:
    uses crayons with control
    uses scissors with control
    buttons and zips clothing, ties shoes
    folds paper with creases
    copies simple designs (lines, circles, squares)

EVALUATION

Language/Reading:

Participates in fingerplays
Takes part in group discussion
Describes familiar objects
Dictates labels for pictures and titles for stories
Dramatizes and pantomimes
Speaks in complete sentences
Sequences ideas and events when telling a story
Identifies capital letters
Identifies lower case letters
Relates spoken words to written symbols

Auditory Skills:

Claps rhythmic patterns
Follows two verbal directions in sequence
Repeats words and sentences
Hears and identifies rhymes
Demonstrates knowledge of beginning sounds

Visual Skills:

Matches shapes
Recognizes eight basic colors
Assembles puzzles
Sees likenesses and differences in pictures and designs
Reproduces from memory a pattern of three designs in a series

Math:

Identifies and names basic shapes (circle, square, triangle, rectangle, diamond, ellipse)

Recognizes numerals 0-10
Recognizes numerals 11-20
Matches numerals with the correct set: 0-5, 6-10
Demonstrates ability to: classify objects
pattern objects
serial order objects

Understands the concept of number
Understands concepts of: more than, fewer than
Puts numbers in order 0-5, 6-10

The following lists have been used for evaluation of children who are into the six-eight years stage of development.

Work Habits:

Produces neat work
Begins work promptly
Completes work on time
Listens well
Follows directions
Works well independently
Works quietly
Participates in group work and discussion

Social Development:

Gets along with others
Respects and cares for property
Obeys classroom rules
Obeys playground rules
Respects rights of others
Respects authority
Accepts responsibility

Reading/Language Arts:

Word attack skills, phonics
Comprehension
Oral expression
Spelling
Writing
  1. Creative
  2. Correct letter size and form
Free reading

Academics

(Teacher can denote whether student is working below, on, or above grade level.)

Mathematics:

Number concepts
Basic facts
Computation skills

Science:

Observes
Questions
Experiments

Health:

Personal Hygiene
Nutrition

Physical Education:

Creative movement
Gross motor skills
Participation

Arts:

Art
Music
Dramatization

PARENT INVOLVEMENT

Parents are the child's first and most important teachers. In the early years, the child begins to form a basic sense of trust and a positive self-image. The parent-child relationship forms a basis for a child's personality structure, motives for achievement and the patterns of development. These are the roots of initiative, imagination, and problem-solving abilities. Parents want the very best for their children. Teachers want the very best for the children. The goals of home and school are best met when parents and teachers support each other as a team, cooperatively seeking ways to enhance the child's social. emotional, intellectual, and physical development.

Early childhood education programs must assume the responsibility of sharing with parents an awareness of the needs and developmental patterns of the young child.

* Emphasizing the importance of the early years in the total development of the child

* Building an awareness of the opportunities parents have in helping their child to learn

* Increasing their knowledge and understanding of child development

* Strengthening parents' confidence in their ability to teach their children

* Supporting parents in this role by supplying ideas and materials to be used in the home

SUGGESTIONS FOR INTERACTING WITH PARENTS

Written communications sent home at regular intervals keep parents informed and involved. Items of interest to parents include:

* Informative announcements about learning activities

* Suggestions to help parents coordinate the child's informal learning at home with the learning skills being emphasized at school; suggested books to read, games to play, places of interest to visit

PARENT-TEACHER CONFERENCES

Pre-enrollment conferences are an excellent means of establishing rapport with parent and child. Ongoing conferences may be initiated by either parent or teacher with responsibility for content shared by both. Techniques for successful parent-teacher conferences include the following:

- Arrange for a mutually convenient time and place.
- Have on hand any necessary information concerning the child.
- Begin and end conference with a positive and encouraging comment.
- Listen to each other with enthusiasm and mutual respect, asking questions to clarify issues. Possible questions are "How do you feel about (child's name) as a kindergartener?" (or whatever grade he is in) "Do you have any questions or concerns about school?" If there is a problem, you might ask, "I need some help and I wondered how you handled this situation at home."
- Be objective about the child, describe behaviors and avoid labels
- Discuss how the child is growing physically, socially, emotionally, and intellectually and how the school is fostering growth in these areas.
- Work for agreement on goals wherever possible
- Be sensitive to the parent's view of the situation. Be tactful and honest.
- Define areas of concern and avoid fixing blame and faultfinding.
- Recognize problems that require possible referral resources.
- Discuss activities that can be planned to extend learning at home without pressure or frustration to the child. Remind the parents to be patient, flexible, and to encourage the efforts of their child.
- Follow up on specific recommendations.

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PARENT INVOLVEMENT

Evaluate yourself and the conference after the parents have left by asking yourself the following questions:

- * Did you serve the child?
- * Did you leave the door open for future conferences?
- * Do you feel that you encouraged a feeling of working together for the welfare of the child?

Make notes of the important things that come out of the conference for future reference.

Discussion items for parent conferences:

The first conference sets the tone for sharing and building of trust between parent and teacher.

Beginning of the year---
  Overview of school year
  Other services available by the school district
  Flow of daily activities
  Health problems or special family situations

Mid year---
  Conversation would evolve around the child's growth and development in the program--strengths as well as weaknesses. Positive suggestions should be made in care of problem areas.

End of year---

Overview of child's progress during the past year should be examined by sharing examples of the child's work.

Suggestions are shared for maintaining and extending skills developed during the summer months.

Resources available in the community should be utilized.

Questions often asked by parents!

How my child is doing during the day?
How do they eat at lunch?
Does he/she have any friends?
Is my child doing as well as other children in class?

But my child does all those things at home!
But you are just playing at school!
My child is reading. He/she is bored with school.

HOME VISITS

A visit in the child's home by the teacher can have a positive effect on the school experience. Visits afford a unique opportunity for the teacher to see the child as part of his total environment and can serve to integrate the teacher into a new relationship with the family. Time and effort invested in home visits will be valuable in enhancing the self-worth of the child. Home visits are also an effective means of helping parents to improve their skills in motivating and teaching their children. To insure a successful visit:

* Make an appointment; be considerate of the family's time schedule.
* Go with something positive to discuss about the child and/or a learning activity that can be done in the home.
* Be cognizant and accepting of the life style of the family.
* Introduce a game, book or creative activity that will necessarily involve the caregiver in a developmental experience with the child.
* Show how toys and games may be improvised using household items to foster learning.
* Demonstrate effective adult-child interactions.
* Decide upon some goals to work toward prior to the next visit.

Home visits can occur throughout the school year as appropriate.

PARENT WORKSHOPS AND STUDY GROUPS

These serve to bring together parents, staff and community resource persons to discuss topics of mutual interests, such as:

* The importance of the early years
* Program objectives and implementation
* How children learn
* Motivation and positive reinforcement
* Parent/child communication
* Positive value of play
* Impact of television on children
* How to develop creativity in children
* How the home can reinforce the skills taught in the early childhood program
* Construction of educational toys, games and other tools of learning
* Developing responsible behavior
* How to use community resources for better family living

Teachers should plan to work with all parents as well as small groups of parents who have mutual needs.

VOLUNTEER ASSISTANCE AT SCHOOL

Parent volunteers can be invaluable in the classroom working in areas such as:

* Helping with organized play activities
* Helping to collect, organize, and prepare supplies and materials
* Accompanying children on trips and outings
* Acting as a resource person, sharing hobbies, skills, interesting experiences and cultural conditions and customs
* Serving as parent coordinators to insure that volunteer help is available as scheduled

- Aiding individuals and small groups of children under the teacher's direction

Some suggestions of ways parents can help in the classroom in different subject areas include:

- Writing — Children are encouraged to make up their own stories, and adults are to write these from the child's dictation until the child is able to write independently.
- Reading — Parents may be asked to read to the children or listen to them read. It is very important for the beginning reader to have someone to listen and to help with difficult words.
- Math — Parents may help children count various objects, use various measuring tools and sort things into sets. Supervising and checking worksheets is helpful.
- Science — Parents may help children plant seeds, make weather charts, conduct experiments with magnets and explore nature around the school.
- Cooking and Tasting Experiences — Many parents enjoy cooking and can use their talents to help children with cooking ventures.
- Games — Reading, writing and math skills are practiced while the children play games they enjoy. Adults may help explain the games and see that rules are followed.
- Art — Some art activities require more supervision than can be given by a teacher. Using parent volunteers can extend the variety of materials the child can use to explore their creative abilities. Parents do not need to be artists to help the children.

Learning Through The Curriculum

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INTEGRATED CURRICULUM

The emphasis in an integrated curriculum is on the development of academic and social competencies, with respect to the natural way children learn.

Early childhood education teachers should consider the research of Jean Piaget and its important implications for teaching and learning in developing an integrated curriculum. Piaget claims that as children interact with their social and physical environment, their growth processes move through four qualitatively distinct stages:

Stage of development	Approximate duration	Fundamental characteristics
Sensory-motor	0-2 years	Preverbal, presymbolic stage. Children progress from spontaneous movements and reflexes to acquired habits and then to acts of intelligence.
Preoperational	2-7 years	Children develop the ability to use words to represent things and begin to manipulate symbols or representations of their physical world. There is, however, no reversible thought process that will allow for logical thought.
Concrete Operational	7-12 years	Children develop logical thought that is based in part on physical manipulation of objects. Their thought processes are reversible.
Formal Operations	12-	Children learn to reason in a hypothetic-deductive manner using symbols or ideas. Their thought processes are no longer tied to physical manipulation of objects.

From the preceding chart, it is clear that children are in the preoperational stage basically from 2-7 years. From 7-12 years the children are in, or near, the concrete operational stage. Piaget has studied the concrete operational stage using the concept of CONSERVATION as a standard for characterizing this stage of mental development. *His research implies that until a child can conserve in the concepts of number, distance, length, area, time, and volume, he is not ready to move into the abstract problem-solving or rote memory exercises. This may mean deferring some of the paper work activities at the symbol or numeral level presently practiced by many four, five, six and seven year olds.

Information about the child's stage of cognitive development serves as basic data for judging the readiness of a child for engaging in various intellectual pursuits. In the concrete operational state, ideas must be abstracted from experiences in the physical world, such as by actions performed on the objects. Young children explore and manipulate objects in order to learn about them. This level of thought is the main consideration in developing curriculum since most children are in or moving toward this level of thought during the time they are in elementary school.

The next level of operational thought is the formal operational level. This is characterized by the ability of children to reason and consider ideas at the abstract level without having to rely on their

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*Piaget's theory of mental development has many subtleties and complexities. No brief version can do it justice. For the reader who is interested in knowing more about the tasks to test CONSERVATION in children, there are several titles in the bibliography which provide detailed studies of this subject.

experience in the physical world.

Piaget calls the process of accommodating new information and generalizing it so that it now becomes a part of their mental structure, equilibration. For this equilibration to occur, the child must experience things for himself. He must act or "operate" himself on objects.

For the teacher this will involve providing an environment in all curriculum areas in which children can try things out for themselves and find their own answers.

To know an object is to act on it, modify it, or transform it and, in the process, understand the way the object is constructed. Such an act is called operation.

Teaching will not be in the conventional "telling" but rather by providing a situation in which the child can learn for himself. This will involve many activities with concrete or manipulative materials. Next, will come semiconcrete, graphic/pictorial experiences. Last, will come abstract, symbolic experiences. The following diagram suggests the desired learning sequence for teaching any concept:

Abstract, symbolic experiences	End here ↑
Semiconcrete, graphic/pictorial experiences	Transition ↑
Concrete, manipulative experiences	Start here

ART

What is Art?

Art is an outlet for creativity which is a natural and spontaneous trait in children. To sustain and nourish this creative spirit, provide a variety of non-structured activities that need little adult direction and avoid showing a child the "right way" to create. Respect should be awarded to each scribble and to each stroke of the child's imagination. Uniqueness, differences, individuality, and originality should be stressed and rewarded. Care should be taken neither to compare children's work nor favor only the "talented ones".

Motivation is an important aspect in creative development. The teacher can introduce each activity in such a way that each child's imagination is stimulated. Each child should be encouraged to think in new directions--divergent thinking is an important creative process.

Allow the children to talk about their art work. Stories, descriptive sentences and poems can be dictated by the children to the teacher about their work. These dictations can be displayed with the children's art work. The art work should be displayed at their eye level.

Art experiences also provide for development of visual discrimination, eye-hand coordination and development of small muscles. Plan activities that include using blunt scissors, pasting and gluing, manipulating clay, and using different sizes of paper.

When working with young children, begin art experiences with simple, basic materials then gradually add a variety of materials. Colors can be introduced at the easel one at a time; later several colors of paint can be used at the easel.

What Goes into the Center?

- easels for painting
- easily accessible shelves to store art supplies
- tables for art activities
- aprons
- sponge & mop for clean-up
- place to hang and dry wet pictures
- tempera paint
- fingerpaint and paper
- brushes of different sizes
- crayons, pencils, felt-tip markers
- colored chalk
- clay and clay boards
- sponges and water
- large and small newsprint
- construction paper
- water color paints and paper
- pipe cleaners
- felt
- paste
- scissors
- masking tape, scotch tape
- staples
- miscellaneous materials and scraps
- string, wire, paper sacks, spools, salt, sand, soapflakes, scrap paper, scrap fabric, colored paper, beads, cellophane, toothpicks, foil pie pans, baby food jars, clothes pins, etc.

The following art activities are appropriate to use with young children. The level of difficulty on each activity can be adapted to the age level of each child.

ACTIVITIES

Crayons

ACTIVITY: Crayons Pictures

MATERIALS: Crayons (in 8-color coded soup or juice cans), paper

PROCEDURE: Children freely express themselves with the crayons.

* * *

ACTIVITY: Crayon Murals

MATERIALS: Large sheet of paper, crayons in cans

PROCEDURE: Children color on paper mounted on wall or floor. Vary activity by coloring to music.

* * *

ACTIVITY: Crayon Melt

MATERIALS: Peeled crayons, wax melter, paper, Q-tips

PROCEDURE: Children use Q-tips to paint on paper, aluminum foil, cardboard, etc.

* * *

ACTIVITY: Pressed Crayons

MATERIALS: Grated crayon, wax paper, iron

PROCEDURE: Grate broken pieces of crayon. Sprinkle over wax paper. Cover with another piece of wax paper and run warm iron over to melt crayons.

* * *

ACTIVITY: Melted Crayon

MATERIALS: Food warming tray, foil, crayons, two clothespins

PROCEDURE: Place foil on warming tray and attach clothespins to each side to hold paper in place. Color with crayon. Heat causes the crayon to melt.

* * *

ACTIVITY: Crayon Resist

MATERIALS: Crayons, black wash (black paint mixed with water), paper, brushes

PROCEDURE: Children color heavily on paper, then paint. Wash over coloring. Variation: A wash of epsom salt mixed with water crystalizes and has a "snowy" effect on colored paper.

* * *

ACTIVITY: Crayons and Fingerpainting

MATERIALS: Crayons, fingerpaint, fingerpaint paper

PROCEDURE: Children color heavily on paper, then fingerpaint over the coloring.

* * *

ACTIVITY: Crayon Stenciling

MATERIALS: Cloth, crayons, iron, paper

PROCEDURE: Use cloth with firm, even solid color. Child draws picture with crayon. Teacher helps to place the fabric face down between two pieces of smooth paper and press with hot iron.

* * *

ACTIVITY: Patchwork Pictures

MATERIALS: Drawing paper, crayons or felt-tip pens

PROCEDURE: Fold a piece of drawing paper as many times as you want. Then open the paper. In each of the folded areas, have the children do a different line pattern until the entire sheet is filled with colorful patterns.

* * *

Chalk

ACTIVITY: Colored Chalk and Liquid

MATERIALS: Colored chalk, paper, liquid: water, water/sugar solution, or buttermilk
Variation: Fingerpaint paper is dampened with water before children begin.

PROCEDURE: Children create on dampened paper with dry chalk or dissolve about six tablespoons of sugar in a small container of water. Soak chalk for about ten minutes before drawing. Chalk will become permanent.

* * *

ACTIVITY: Chalk Outside

MATERIALS: Colored or white chalk, paper (optional)

PROCEDURE: Children create on sidewalk, brick or concrete structures..

* * *

ACTIVITY: Liquid Starch and Chalk

MATERIALS: Liquid starch, water, chalk

PROCEDURE: Thin liquid starch with water and dip chalk into solution before applying to paper.

* * *

ACTIVITY: Chalk with Yarn or String

MATERIALS: Yarn or string approximately 36" long, paper, chalk

PROCEDURE: Tell the children to make a design on the table with the yarn. This can be done by just dropping the yarn, letting it fall as it might or by actually forming the yarn in a specific design. Place paper on top of "yarn design" and color over the chalk. Yarn design will appear on paper.

* * *

ACTIVITY: Chalk and Tempera Paint

MATERIALS: Chalk, tempera paint, paper, large brushes

PROCEDURE: Have the children make a drawing or design with colored chalk on a piece of paper. Next have them coat another piece of paper of the same size with white tempera paint. Place the chalk drawing on top of tempera paint. Rub firmly over the paint then separate the two papers before they dry. Two prints will result, and the chalk will merge with the paint.

* * *

Paste or Glue

ACTIVITY: Collage

MATERIALS: Paste or glue, construction paper, collage material: sandpaper different textured fabrics, Christmas stamps, cotton balls, buttons, yarn, seeds, dried beans, sawdust, leaves, grass, twigs, noodles, spaghetti, pipecleaners, feathers, sponges, aluminum foil, broken egg shells, styrofoam packing, toothpicks, bark, shells, etc.

PROCEDURE: Have the children paste or glue the collage material on the construction paper. Let the children form their own designs on the paper or glue material in a random fashion.

* * *

ACTIVITY: Powdered Tempera on Glue

MATERIALS: Glue, squeeze bottles, powdered tempera, heavy paper

PROCEDURE: Children squeeze glue onto heavy paper making a design. Then sprinkle powdered tempera on top and let dry. Shake off loose tempera when dry.

* * *

ACTIVITY: Glue Drop

MATERIALS: Glue, waxed paper, tempera or food coloring, tongue depressors

PROCEDURE: Mix glue with paint or food coloring. Drip on waxed paper with tongue depressors. Let dry; then peel glue drops off of waxed paper. Glue drops on paper and color or paint around them.

* * *

Clay

ACTIVITY: Clay

MATERIALS: Clay, clay trays (formica scraps, tile covered with oil cloth, trays covered with contact paper, etc.), coffee cans (painted or covered with contact paper)
Variations: Cookie cutters, scissors, rolling pins

PROCEDURE: Children can mold clay into desired shape.

* * *

ACTIVITY: Clay Textures

MATERIALS: Self-hardening clay, objects to press into the clay, plastic toys, paper clips, pieces of wood, etc.

PROCEDURE: Give each child a small ball of clay. Have the children divide their clay into two balls and flatten both balls of clay into a one-half inch pancake on a damp paper towel. Use many different objects to press into the clay to make different textures. Do this same procedure with the second ball of clay. Use one of the pancakes to make a necklace (be sure to make a hole to put a string through). The second pancake can be used to make a class mobile.

* * *

ACTIVITY: Color Beads

MATERIALS: Tub of red, blue, and yellow playdoh, toothpicks, yarn or string

PROCEDURE: Give each child about two tablespoons of each color of playdoh. Take a pinch of red and pinch of blue and work them together until they are blended. Roll into a bead shape; stick a toothpick into the bead; then remove it. Pinch blue and yellow together and repeat the process above--do the same with red and yellow.

Sculpture

ACTIVITY: Styrofoam Sculptures

MATERIALS: Various sizes of styrofoam pieces, styrofoam egg cartons, toothpicks

PROCEDURE: Children use toothpicks to stick styrofoam together.

* * *

ACTIVITY: Box Sculptures

MATERIALS: Variety of boxes, glue, paint, brushes

PROCEDURE: Children glue boxes together to build a sculpture. When dry, it may be painted.

* * *

ACTIVITY: Toothpick and Pea Sculpture

MATERIALS: Cardboard for base (4" x 4" is good), round toothpicks, and chowder (whole) peas

PROCEDURE: Soak the peas overnight. After they have soaked, give the children a handful of peas and toothpicks, They are now ready to construct a sculpture. Glue to the cardboard. The peas will eventually shrink and harden and make the sculpture tighter.

* * *

ACTIVITY: Cardboard Sculptures

MATERIALS: Cardboard scraps, glue, scissors, hole punch

PROCEDURE: Cut the cardboard into different basic shapes. The students can cut slots into the cardboard and slip the edge of the other shape into the slot. Add glue to each joint to make the sculpture more stable.

* * *

ACTIVITY: Lumber Sculptures

MATERIALS: Scrap lumber, glue, paint

PROCEDURE: Children glue pieces of scrap lumber together. Paint when dry.

* * *

Paint

ACTIVITY: Easel Painting

MATERIALS: Easel, tempera paint in juice cans or baby food jars, brushes, newsprint

PROCEDURE: Paint should be creamy--add liquid soap for easier clean-up. Begin with one or two colors of paint. Demonstrate to children how to scrape paint--brush one side of jar and stress keeping the colors separate and not mixing them.

* * *

ACTIVITY: String Painting

MATERIALS: Five strings on clothespins, small containers of paint, paper

PROCEDURE: Children pull string over paper.

* * *

ACTIVITY: Blob painting

MATERIALS: Folded construction paper, paint, spoons
Variation: Salt may be sprinkled on paint

PROCEDURE: Children drop a spoonful of several colors of paint on paper and press on folded paper.

* * *

ACTIVITY: Wandering Paint

MATERIALS: Pans, dry tempera or food coloring, paper, water

PROCEDURE: Dip construction paper in pan of water. Sprinkle dry tempera paint on it. Let dry overnight; then string paint on top of it.

* * *

ACTIVITY: Fork Painting

MATERIALS: Paint, forks, construction paper

PROCEDURE: Dip forks in paint. Children print with forks on paper.

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ACTIVITY: Marble Rolls

MATERIALS: Box with "three" sides, marble, paint, paper cut to size of box

PROCEDURE: Marbles are placed in paint. Child spoons marble into paper-lined box and freely tilts the box causing marbles to roll. Variations: Use spools, acorns, or golf balls.

* * *

ACTIVITY: Roll Painting

MATERIALS: Empty shoe polish jars (roll on type), paint, paper

PROCEDURE: Child create picture by rolling paint-filled shoe polish jars on paper.

* * *

ACTIVITY: Bubble Art

MATERIALS: Bubble soap, food coloring or tempera paint, paper, bowls, wands

PROCEDURE: Mix food coloring and bubble soap together. Don't over-stir. Children dip wands into bowl and blow bubbles toward paper.

* * *

Yarn - String

ACTIVITY: String Magic

MATERIALS: 8" x 12" long string or yarn, glue, 8½" x 11" construction paper (light colors), crayons, markers or map pencils

PROCEDURE: The first class session, the children can glue the yarn or string onto the construction paper. Have them take a piece of yarn, dip it into glue and place on construction paper in an interesting but simple line. Let dry overnight. Children then can color inside spaces to make a design.

* * *

ACTIVITY: Line Drawings

MATERIALS: Drawing paper, felt-tip markers or crayons

PROCEDURE: Discuss with the children different kinds of lines; then have them choose one kind of line for their drawing, such as zig-zag, wavy, etc. The students then do an entire line design drawing using this one kind of line.

Variation: Fold 9" x 12" pieces of paper into fourths and have the children do each section with a different line design.

* * *

ACTIVITY: Yarn Fantasy

MATERIALS: Cardboard, wax paper, glue, liquid starch, tissue paper, yarn

PROCEDURE: Glue a piece of wax paper on cardboard. Paint the piece of wax paper with liquid starch. Drop small pieces of tissue paper on the wax paper. Brush a coat of liquid starch over all the tissue. Allow to dry overnight. The next day have the children dip various colors of yarn pieces into glue and drop them on the tissue collage picture.

* * *

ACTIVITY: Line Walk

MATERIALS: Pleasant weather

PROCEDURE: Take a walk with the students and have them locate examples of various line types: horizontal, vertical, diagonal, zig-zag, curving, etc. Some examples the students might see are sidewalks, television antennas, tree limbs, chain link fences, etc.

* * *

ACTIVITY: Form

MATERIALS: Rocks or pebbles smoothed by water

PROCEDURE: Display the rocks and allow the students to hold them. Discuss with them the form of the rocks, noting curving, rounded surfaces. Challenge the students to find other examples of curving, rounded forms in the classroom or school grounds.

* * *

ACTIVITY: Lacing

MATERIALS: Plastic string, yarn with the ends dipped in glue and covered with masking tape

PROCEDURE: Provide a shape with paper-punched holes around the edges. Have the child lace around the edges. Variations: Allow the child to create a pattern and paperpunch around edges.

* * *

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ACTIVITY: Stitching on Styrofoam Trays

MATERIALS: Styrofoam trays, dull pointed tapestry needles or plastic needles with large eyes, yarn or string

PROCEDURE: Teacher or child draws a simple shape or picture on the tray and the child stitches along the line.

* * *

ACTIVITY: Stitching on Burlap

MATERIALS: Burlap, dull pointed needles, tape embroidery hoops, chalk or pencils

PROCEDURE: Tape edges of burlap to prevent raveling. Put it in an embroidery hoop. Stitching may either be random or in a pattern. It may be drawn onto the cloth with chalk or pencil.

Holiday Art

ACTIVITY: Easel Painting

MATERIALS: Easel, paint (colors appropriate to holiday, such as orange and black for Halloween, red and green for Christmas, etc.) paper (newsprint or construction paper cut in shapes appropriate to holiday such as pumpkins, turkeys, reindeers, etc.)

PROCEDURE: Children express themselves and their own ideas.

* * *

ACTIVITY: Collages

MATERIALS: One of the following may be used: collage box, colored rice, beans, etc., glue, paper cut in shapes appropriate to the holiday

PROCEDURE: Children glue collage materials onto holiday shapes.

* * *

ACTIVITY: Printing with Objects

MATERIALS: Cookie cutters (may be in holiday shapes), spools, sponges, etc.. paint, paper cut in shapes appropriate to holiday

PROCEDURE: Children press object into paint, then onto holiday shapes to make design.

* * *

ACTIVITY: Paper Chains

MATERIALS: Precut strips of construction paper in holiday colors (Halloween - orange and black, Hanukkah - royal blue and white, etc.), glue

PROCEDURE: The children make chains with the strips of construction paper.

* * *

HALLOWEEN

ACTIVITY: Halloween Magic with a Pumpkin

MATERIALS: Real pumpkins (the children can bring them to school or provide several pumpkins for the class), eyes, nose and mouth cut out of black construction or contact paper, yarn, colored construction paper

PROCEDURE: Have the children decorate the pumpkin by peeling off the backing of the black contact paper and sticking the shapes onto the pumpkin. If construction paper shapes are used, let the children glue them onto the pumpkin. Yarn can be added for hair and hats made from construction paper.

* * *

ACTIVITY: Trick or Treat Bags

MATERIALS: Small paper bag for each child, collage box, glue

PROCEDURE: Children use collage materials to create trick or treat bags.

* * *

ACTIVITY: Masks

MATERIALS: Paper plates, yarn, Q-tips, paint

PROCEDURE: Cut eyes, nose and mouth out of paper plates. Staple yarn piece to rims on front side of plate to form strap for holding mask on face. Children paint with Q-tips to create masks.

* * *

ACTIVITY: Handle Mask

MATERIALS: Wire clothes hangers, old nylon stockings or panty hose, scraps of felt, cloth, and yarn.

PROCEDURE: Bend the clothes hangers to form a circle. Cover with the stockings. Have the children create faces by gluing on the scraps. Be sure to form a handle by bending the open end hook back on itself.

* * *

ACTIVITY: Pumpkin Seed Collage

MATERIALS: Pumpkin seeds, dark-colored paper

PROCEDURE: Have the children glue the pumpkin seeds on the paper.

* * *

ACTIVITY: Halloween Banners

MATERIALS: Crepe paper (black and orange), paper towel tubes

PROCEDURE: Have children cover towel tube with crepe paper. Children glue pre-cut long strips of black and orange crepe paper on one end of tube.

* * *

ACTIVITY: Rattles or Noisemakers

MATERIALS: Small empty boxes, stones or spools, tape, paint, sticks

PROCEDURE: Have the children put a few stones or spools in the small boxes and tape shut. The children may decorate the boxes with orange and black paint.

* * *

ACTIVITY: Eerie Pictures

MATERIALS: Crayons, black paint, newsprint

PROCEDURE: The children color a picture and then paint over the picture with black paint. The paint will not cover the crayon and the result is "spooky".

* * *

THANKSGIVING

ACTIVITY: Totem Poles

MATERIALS: Variety of colorful large boxes, shapes cut of eyes, noses, mouths, eyebrows, ears, etc., glue

PROCEDURE: Cut holes in the top and bottom of each box. Have the children paste shapes on the boxes to make faces. Put each box over a broom handle.

* * *

ACTIVITY: Indian Clothes

MATERIALS: Large brown paper bags, paint, scissors

PROCEDURE: Girls: Cut a hole for the head and arms in the paper bags. The bags can be decorated by painting designs on them and fringing the bottom. Boys: Remove the bottom five inches from large brown bags.

Make a vest by cutting a hole for the head and arms and cutting up the front. The boys can paint designs on their vests and fringe the bottom and front edges.

* * *

ACTIVITY: Necklaces

MATERIALS: Dyed macaroni or lima beans, yarn or string, and large blunt needles

PROCEDURE: The children can string macaroni to make an Indian necklace or soak lima beans until they are soft. Let the children make a necklace from them by sticking a large, blunt needle which has been threaded with string through each bean.

* * *

ACTIVITY: Turkey Blobs

MATERIALS: Thick brown tempera paint, construction paper, crayons or felt-tip markers

PROCEDURE: Drop some thick brown tempera paint in the center of a piece of construction paper. Fold the paper in half and rub the outside. Open the paper and use the blob as a basis for a turkey. Use crayons or felt-tip markers to add the details.

* * *

ACTIVITY: Pilgrim Hats

MATERIALS: White butcher paper or construction paper cut in 1' x 1' squares, black construction paper (12" x 18") cut in 1" strips, stapler, aluminum foil, glue

PROCEDURE: Girls' hat: Fold one edge of white square up about 1 1/2". Staple the two unfolded corners together to form cone shape, leaving folded edge in front.

Boys' hat: Draw a circle for the hat brim on black construction paper making brim about 1 1/2" wide. The inside of the circle should fit the boys' heads. Then, inside the circle, draw the front of the hat to fold up. Cut hat out. Cut buckle from aluminum foil and glue on front of hat. Use white 1" strip for hat band under buckle.

* * *

ACTIVITY: Thanksgiving Shape Book

MATERIALS: Construction paper, newsprint, crayons or felt-tip markers

PROCEDURE: Have book made from construction paper cut and book pages made from newsprint cut into Thanksgiving shape of a turkey, cornucopia, or Pilgrim's hat. Children draw what they are thankful for on sheets of paper.

* * *

HANUKKAH

ACTIVITY: Sponge Printing

MATERIALS: Sponges, paper, orange, white or dark blue paint

PROCEDURE: Cut sponges in the shape of a candle, lion, Star of David, or dreidel. Have the children print with these shapes on construction paper.

* * *

ACTIVITY: Hanukkah Greeting Cards

MATERIALS: Royal blue or white construction paper, screens, toothbrushes, paint, Hanukkah symbols

PROCEDURE: Fold construction paper in half. Place Hanukkah symbols on paper and spatter paint the card. Variation: Sponge print the cards.

* * *

ACTIVITY: Star of David

MATERIALS: Cardboard triangles, tissue paper, glue, blue felt

PROCEDURE: Have the children cut and paste two triangles, one inverted over the other to form Star of David (six-pointed star). Have them glue white and blue tissue balls on one side and felt on the other.

* * *

CHRISTMAS

ACTIVITY: Evergreen Paint Brushes

MATERIALS: Long sprigs of evergreen, dark-colored paint, white paper or vise versa

PROCEDURE: Have children use the sprigs of evergreen as paint brushes.

* * *

ACTIVITY: Three-D Stars

MATERIALS: Wooden toothpicks dyed with food coloring, styrofoam balls

PROCEDURE: Have the children make stars with the toothpicks and balls, then hang by yarn to the tree or in the window.

* * *

ACTIVITY: Egg Cartons Decorations

MATERIALS: Sections of egg cartons, aluminum foil, paint, magic markers or melted crayon, pipe cleaners, (optional: glitter)

PROCEDURE: Cover the individual egg carton sections with aluminum foil. Allow the children to decorate with paint, magic markers, melted crayons and/or glitter. Thread a pipe cleaner through the bell-like section and hang on tree.

* * *

ACTIVITY: Cookie Cutter Decorations

MATERIALS: Baker's clay, cookie cutters, tempera, glitter

PROCEDURE: Make baker's clay. Have the children use the cookie cutters to cut out holiday shapes. Let them dry overnight. Be sure to punch a hole in the top for hanging the ornament. Let the children paint the decorations the next day.

* * *

ACTIVITY: Paper Chains

MATERIALS: Red and green construction paper cut into strips about 1" x 1' long, glue or paste

PROCEDURE: Have the children make chains by placing glue or paste on one end of the strip and making a loop and sticking it together.

* * *

ACTIVITY: Wreath

MATERIALS: Construction paper cut into 3" x 5" strips, green construction paper cut into a wreath shape, glue, red construction paper, hole punch

PROCEDURE: Tear the construction paper strips into holly leaves. Have the children glue them onto a heavy sheet of paper that has been cut into wreath shape. Berries made out of red construction paper by using a paper punch may be added.

* * *

CHRISTMAS GIFT IDEAS

ACTIVITY: Handprints

MATERIALS: Art paper, paint or plaster of paris

PROCEDURE: Have the children make their handprints on heavy paper or in plaster of paris. Punch a hole in the top and attach a red ribbon tied in a bow.

* * *

ACTIVITY: Candleholders

MATERIALS: Sawdust dough or salt dough (see recipes), tempera paint, glitter, candles

PROCEDURE: Using a 3" ball of dough, have the children mold a candleholder by flattening the bottom and using a real candle to make the candle hole the size they wish. Allow to dry; paint and sprinkle with glitter.

* * *

ACTIVITY: Pinecone Decorations

MATERIALS: Pinecones, glitter, glue, sequins

PROCEDURE: Have the children brush the tips of the pinecones with glue and then sprinkle with glitter and/or sequins.

* * *

VALENTINES DAY

ACTIVITY: Heart Mail Boxes

MATERIALS: Large heart shaped paper, hole punch, yarn

PROCEDURE: Punch holes around two hearts (holes should match). Child uses yarn to lace or "sew" hearts together. Encourage children to sew "straight up" and "straight down". The top of the heart is left open for valentines to be dropped in.

* * *

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ACTIVITY: Valentines

MATERIALS: Fold paper the size of cards, doilies, old Valentines, red and white paper scraps, yarn, etc., scissors, glue

PROCEDURE: Children cut and paste doilies, old valentines, paper scraps, etc., onto folded "card-size" paper to create valentines. Messages may be dictated by the teacher.

ACTIVITY: Valentine Tree

MATERIALS: Plaster of Paris, paper cups, twigs, pink and red hearts, glue

PROCEDURE: Mix Plaster of Paris and pour into paper cups. Have ready a tree twig for each child. Plant twigs and let dry. Have the children glue small pink and red hearts onto the branches. The plaster sets in a few minutes.

ACTIVITY: Valentine's Box

MATERIALS: Shoe boxes, tissue paper, glue

PROCEDURE: Have the children paint tissue paper cut in heart shapes and glue on a shoe box with diluted glue.

* * *

LINCOLN'S AND WASHINGTON'S BIRTHDAY

ACTIVITY: Lincoln's Hat

MATERIALS: 12" x 18" and 9" x 12" sheets of black construction paper, tape

PROCEDURE: Use the large sheet of black construction paper for the brim of the hat. To make the top, roll the smaller sheet of black construction paper and tape to the brim of the hat.

* * *

ACTIVITY: Red, White, and Blue Collage

MATERIALS: Red, white, and blue paper of different types and textures, gummed stickers, flags, stars, bells, etc., background paper, paste

PROCEDURE: Cut paper into strips, squares and rectangles of different sizes. Let children select and arrange the paper and stickers on background paper.

* * *

ACTIVITY: Washington Hats

MATERIALS: Pieces of 6" x 9" black construction paper

PROCEDURE: The hat is made of three pieces of six by nine inch black construction paper cut out in semi-circles. Staple at the corners to fit child's head.

* * *

EASTER

ACTIVITY: Batik Eggs

MATERIALS: Crayons, large white construction paper egg shapes, tempera paint

PROCEDURE: Cut the construction paper into egg shapes and have the children color designs on them. Thin some pastel tempera paint with water and have the children paint the eggs with tempera paint.

* * *

ACTIVITY: Egg Shell Mosaics

MATERIALS: Dyed egg shell pieces (Dye with mixture of food coloring and alcohol), paper cut ino Easter shapes, glue

PROCEDURE: Children glue egg shells on paper

* * *

ACTIVITY: Egg Painting

MATERIALS: Warm water, egg yolks, paint brushes, powdered tempera, white construction paper

PROCEDURE: Mix equal parts of warm water and egg yolks. Dip tip of dampened paint brush into mixture, then into small mound of powdered tempera. Brush onto white construction paper cut into egg shapes until egg and paint are mixed together. Painting becomes brighter by applying one color over another, letting first color show through.

ACTIVITY: Easter Baskets

MATERIALS: Optionals: ½ pt. milk cartons, yarn; or cottage cheese cartons; oatmeal boxes cut in half, milk cartons, small boxes, or construction paper.

PROCEDURE: Milk carton basket - cut top off, make handle with yarn. Have children decorate boxes with paint, egg shells or Easter shapes.

* * *

MOTHER'S DAY

ACTIVITY: Dried Flower Arrangement

MATERIALS: Weeds, flowers, clay, containers - aersol can lids, large plastic medicine bottles, plastic film containers.

PROCEDURE: Take the children on a nature walk to pick flowers and weeds. Set them in the sun to dry for a few days. Have the children dip the flowers and weeds in tempera paint. After they have dried, have them arrange the flowers in a ball of clay and put the clay in a container. The container can be decorated with paint, ribbon, yarn, etc.

* * *

ACTIVITY: Silhouettes

MATERIALS: Black or white construction paper, glue

PROCEDURE: Make a silhouette picture of each child. Cut out and mount on contrasting black or white background.

* * *

RECIPES

Nonhardening No-Cook Play Dough

2 cups self-rising flour
2 T. alum
2 T. salt
2 T. cooking oil
1 cup, plus 2 T. boiling water

* * *

Salt Paint

1/3 cup salt
1/4 tsp. food coloring

Spread in pan to dry before putting in shakers.

* * *

Cooked Play Dough

1 cup flour
½ cup salt
1 cup water
1 T. vegetable oil
2 tsp. cream of tartar

Heat until ingredients form ball; add food coloring.

* * *

Potter's Clay

½ cup flour
½ cup cornstarch
1 cup dissolved in 3 3/4 cups of boiling water

Blend flour and cornstarch with enough water to make paste. Boil water and salt. Add to cornstarch mix and cook until clear. Cool overnight then add six to eight cups of flour and knead until you have the right consistency.

* * *

Irridescent Soap Bubbles

1 cup of water
2 T. liquid detergent
1 T. glycerine
½ tsp. sugar

Mix

* * *

Sand Paint

½ cup sand
1 T. powder paint

Shake onto surface brushed with glue.

* * *

Slippery Clay

1 cup cornstarch
2 cups baking powder
10 oz. water with coloring

Mix in large bowl. Use on a tray or in a bowl if it feels slimy.

* * *

Sawdust Art

(Sawdust)
(Wheat paste) equal parts
Water

Add water as needed. Mold into shapes and let dry for several days.

* * *

Silly Putty for Two

1/2 cup Elmer's Glue
1/2 cup or less liquid starch
Optional: food coloring

Mix--lift globby glue out of starch and knead until it thickens (about five minutes). Stretch and pull it. Store airtight.

* * *

Thick Squirt Paint

1 cup flour
1 cup salt
1 cup water
Dry tempera

Mix and put in squirt bottle.

* * *

Baked Dough

2 cups salt
1 cup flour
1 2/3 cups water

Cook until thick. Let children pat warm mixture around outside of different shaped cans, bowls, etc. Bake 1 hour at 200 degrees.

* * *

Oatmeal Dough

1 part flour
2 parts oatmeal
1 part water

Add water gradually to bind the mixture.

* * *

Cornstarch Clay

½ cup cornstarch
1 cup salt
1 cup boiling water

Boil the mixture until is is similar to a soft-ball. Then knead on wax paper. Wrap in a wet cloth to keep the clay moist.

* * *

Teacher Notes

COMMUNICATION SKILLS

Skill in communication is basic to all education. This involves the development of listening skills, oral language, reading skills, and writing skills. Teachers arrange positive individual and group experiences and learning activities to allow growth in all facets of language development.

Teachers serve as models to help improve a child's language. They should not use "corrective" techniques. This adult attitude will help produce a child who is free to communicate in areas of knowledge, curiosity, emotions and creativity.

Oral Language: Children express thoughts, feelings, ideas, and interaction with others through oral communication. Group talk, open-ended sentences, add-on sentences, personal experiences, class rules, and cooperative planning are some areas to consider.

ACTIVITIES

ACTIVITY: Speaks before a group

PROCEDURE: Offer students structured "Show and Tell" times to speak before peers.

* * *

ACTIVITY: Speaks with an acceptable rate of volume

PROCEDURE: Discuss "inside and outside" voices. Ask the students why "inside" voices are necessary in the classroom. Direct students to lower voices when they become too loud. Use positive approaches, such as:

> "Please use an inside voice."
> "You are sitting beside John. Talk softly to him."
> "That was an outside voice. It hurts my ears. How can you talk without hurting our ears?"

* * *

ACTIVITY: Participates in group discussions

PROCEDURE: Direct the students to use acceptable listening skills so that they are able to share their speaking time with others. Set good examples for the students by listening attentively, not interrrupting, and keeping eye contact.

Use such outings as field trips and nature walks to provide an experience base for group discussion. Be a good model by leading discussion with complete sentences.

Use photographs, magazines, pictures, or graphics to encourage children to share their emotions through discussion.

COMMUNICATION/ORAL

MATERIALS NEEDED: 9" x 12" construction paper--white or light color
felt tip marker

Draw simple pictures of the following expressions: Happy, sad, angry, surprise. Show the pictures one at a time and have the students describe the feeling.

* * *

ACTIVITY: I Spy Game

PROCEDURE: Begin the game by describing an object to the students; for example, "I spy something yellow that is small and round." The student who correctly guesses the object that is being described, has a turn to "spy" something.
Variation: Give each student an empty paper towel or toilet paper tube. Have the students "spy" objects through their spy glass.

* * *

ACTIVITY: Grab-bag Game

MATERIALS NEEDED: One large-size paper bag, one small toy or other small object per child

PROCEDURE: Fill the paper bag with a set of objects. Decorate the outside of the bag to correspond with the theme of the objects inside; for example: all toys, all round things, all Halloween things, and so forth. Let the students take turns selecting an object and describing it.

* * *

ACTIVITY: Policeman, Policeman, Where is My Child

MATERIALS NEEDED: Two Children

PROCEDURE: One child is the parent, the other one a child. Parent describes a child in circle and policeman has to find the child described. Extend to written descriptions for older children.

* * *

ACTIVITY: Feel Box

MATERIALS NEEDED: Feel box with object inside

PROCEDURE: Child places hand in box and describes contents without naming the object.

Examples of objects: soft, hard, cold, fuzzy, flat, round, etc. (A simple feel box - place an empty oatmeal box inside a man's sock.)

* * *

ACTIVITY: Fishing for Feelings

MATERIALS NEEDED: Small pole with magnet attached by string, a small box for fishing pole, small envelopes containing words to be acted out (paper clips attached).

PROCEDURE: Children work in pairs or small groups. One child "fishes" for an envelope. He/she tries to get the other(s) to guess what feeling word he/she has by saying short phrases or sentences (without the word) as clues. Each child takes a turn.

With groups of students, ask individuals to respond to "between".

"Mary, stand between John and Joe."
Using small paper or foam balls and boxes, direct the students:

"Put the ball over the box."
"Put the ball under the box."
Continue this activity with in-out, behind, in front of.

* * *

ACTIVITY: Opposites: Hot-Cold, Hard-Soft, Wet-Dry, Loud-Soft, Fast-Slow, Laugh-Cry, Sweet-Sour

PROCEDURE: Direct the students to identify pairs of objects which have contrasting properties:

brick (hard) - pillow (soft)
sponge (wet) - sponge (dry)
Direct these phrases to the students to answer.
" Ice is cold, fire is ____. (hot)
Sugar is sweet, lemons are_____. (sour) "
Provide the students with commercially-made or teacher-made lotto games that emphasize opposites.

* * *

ACTIVITY: Puppet Magic

MATERIALS NEEDED: Small paper bags, yarn, construction paper, scissors, glue, crayons, felt scraps

PROCEDURE: Make sack puppet and write a brief story about the puppet. Use the puppet stage (can be made of cigar box) to introduce puppet to classmates and tell the story written.

* * *

ACTIVITY: "Who Am I?"

MATERIALS NEEDED: Paper, pencil

PROCEDURE: Children make up riddles about themselves, using physical descriptions and likes and dislikes. Teacher collects papers, mixes them up, then has students read them aloud and try to solve the riddle.

* * *

Listening: Children develop auditory discrimination and memory through daily activities and experiences. The development of these skills enriches oral language and aids in learning to read.

ACTIVITY: Auditory Discrimination - Environmental Sounds

MATERIALS NEEDED: Tape player, tape of common sounds, pictures

PROCEDURE: Use an auditory discrimination tape with common environment sounds. Ask the students to identify these sounds. Corresponding pictures can be used. The students hold up their pictures when their sound is heard on the tape recorder.

* * *

ACTIVITY: Auditory Discrimination - Animal Sounds

PROCEDURE: Play the "How Do You?" game. Ask the students
"How do you bark like a dog?"
"How do you baa like a sheep?"
"How do you quack like a duck?"
A variation of this game is the "What goes...?" game. Ask the students: "What goes baa?"
"What goes oink?"
"What goes moo?"

* * *

ACTIVITY: Auditory Discrimination - Voice

MATERIALS NEEDED: Tape recorder

PROCEDURE: Record the students' voices on a tape recorder and play back during group time. Have the class guess whose voice they hear, or have the students stand up when they hear their own voices on the tape recorder.

* * *

ACTIVITY: Auditory Discrimination - Voice

MATERIALS NEEDED: circle of chairs, blindfold

PROCEDURE: Play "Little Tommy Tittlemouse" with the class. Have the students form a circle and choose someone to sit in a chair, inside the circle blindfolded. Have the class recite the following:

> Little Tommy Tittlemouse,
> Lives in a little house,
> Someone's knocking (the class knocks on the floor)
> Me oh my,
> Someone's knocking. (the class knocks again)

Choose a student to quietly walk up behind the blindfolded student and say, "It is I." The blindfolded student guesses whose voice said, "It is I."

* * *

ACTIVITY: Auditory Discrimination - Loud and Soft

MATERIALS NEEDED: Eight identical cans, adhesive-backed paper, rice, coffee, beans, sand, nails, etc.

PROCEDURE: Fill four pairs of cans with four of the substances or objects listed above. Cover the cans with colorful adhesive backed paper. Have the students shake the cans until they find a can with a matching sound.

* * *

ACTIVITY: Auditory Discrimination - High and Low

MATERIALS NEEDED: A musical instrument

PROCEDURE: Play the "Three Bears" discrimination game. Tell the students that a very low note on the autoharp is papa bear's voice, a middle note is mama bear's voice and a very high note is baby bear's voice. Play a note and have the students guess whose voice it is.

* * *

ACTIVITY: Auditory Discrimination - Rhymes

MATERIALS NEEDED: Pictures of objects whose names rhyme

PROCEDURE: Provide the students with pictures of objects whose names rhyme, such as a rock and sock, train and chain, bell and shell. Have the students match the pictures of objects with rhyming names.

* * *

ACTIVITY: Auditory Discrimination - Rhymes

MATERIALS NEEDED: A poem or book with the pattern started, i.e., Bill Martin's "Brown Bear, Brown Bear, What do you See?..."

PROCEDURE: Read the book or poem to the class and then begin to leave out and add personal touches such as: "Tommy, Tommy, What do you see?" "I see a red flag looking at me."

* * *

ACTIVITY: Auditory Discrimination - Initial Consonant

PROCEDURE: Dismiss the students from grouptime by asking all the students whose names begin with a particular consonant sound to stand up. Continue until all the students have been dismissed.

* * *

ACTIVITY: Auditory Discrimination - Beginning Sound Recognition

MATERIALS NEEDED: Sound cards (large cards with four divisions: on each card, place one letter and a picture of an object that begins with that letter. Make small cards with pictures that begin with that sound.)

PROCEDURE: Mix pictures of objects. Child sorts and places on correct card.

* * *

ACTIVITY: Auditory Discrimination - Beginning Sound Recognition

MATERIALS NEEDED: 26 colored containers - 21 for consonants (all one color); five in contrasting color for vowels. They should contain objects which begin with the letter on the box.

PROCEDURE: Introduce one box of objects. Name objects with emphasis on beginning sound. Associate with letter sound on box. Place on shelf for children's use.

* * *

ACTIVITY: Auditory Discrimination - "Sound Detective"

MATERIALS NEEDED: Tape, tape recorder, pencils, worksheets

PROCEDURE: Have worksheets available. Each has ten boxes with four letters in each box. Children listen to tape of words and circle the correct initial consonant sound. (This can be adapted for final consonant sounds, consonant blends, long or short vowel sounds.)

* * *

ACTIVITY: Auditory Memory - Following Directions

PROCEDURE: Play a directions game. Give the students silly directions such as, "Hop around the circle then touch Henry on the head." Gradually add directions.

* * *

ACTIVITY: Auditory Memory - Following Directions

MATERIALS NEEDED: Tape recorder, teacher-made sheets with geometric designs, crayons

PROCEDURE: Children listen to tape recorder which gives specific instructions. The children are instructed to use certain crayons to color the geometric shapes in exact patterns. Example:

> "Color the inside of the square with your red crayon; then color the outline of the square in yellow."

* * *

ACTIVITY: Auditory Memory - Following Directions

MATERIALS NEEDED: Tape, tape recorder, worksheet with various "cages" drawn on it, crayons (optional: pictures of animals to be pasted on).

PROCEDURE: Children listen carefully to the tape, which instructs them to color (or paste on) animal pictures in certain "cages". Example:

> "In cage #5, draw a brown polar bear. Turn off the recorder until you are ready to go on."

* * *

ACTIVITY: Auditory Memory - "I'm Going on a Trip"

MATERIALS NEEDED: Circle of children

PROCEDURE: First player begins by saying: "I'm going on a trip and in my suitcase I will take _____." Next child then repeats the sentence naming the item of the first player and naming another item. Continue in same manner around the circle adding one item each time.

* * *

ACTIVITY: Auditory Memory - Listening

MATERIALS NEEDED: Library book

PROCEDURE: Children work in pairs. One reads story while other listens. The listener must then relate the basic story line back to the reader. Then the children trade places.

* * *

ACTIVITY: Auditory Memory - Listening and Classifying

PROCEDURE: Teacher or student names three to five items (animals, colors, shapes, etc.). All but one item named should represent a relationship. Students are asked to listen and verbally identify relationship of items named and/or the item which cannot be classified with the others.

* * *

ACTIVITY: Auditory Memory - Rhythmic Repetition

PROCEDURE: Clap simple rhythmic patterns. Children listen and repeat pattern.

* *

ACTIVITY: Auditory Memory - Story Sequence

PROCEDURE: Read a story to the students and afterwards ask, "What happened first?" Next, "What happened at the last?" This inquiry helps students become aware of story sequence.

Reading: Reading involves the ability to derive meaning from printed symbols. This requires the children to recognize the symbols and their sounds and to bring experiential meaning to the task.

ACTIVITY: Visual Perception

MATERIALS NEEDED: Assortment of cut-out alphabet letters, name card

PROCEDURE: Student finds specific letters from an assortment and places them correctly under the letters on his/her name card.

* * *

ACTIVITY: "What's Missing?"

MATERIALS NEEDED: Tray, variety of objects, cloth

PROCEDURE: Place a variety of objects on a tray. Students close their eyes and the teacher or a student removes one or more objects from the tray. Students open their eyes and guess what is missing.

Show the students a table with many objects on it. Tell them to look at all the objects; then cover the table with a cloth. Ask the students to name an object that is on the table. If they answer correctly, they keep the object named.

ACTIVITY: Reproduction of Design

MATERIALS NEEDED: Small colored blocks and block pattern cards

PROCEDURE: Provide the students with small colored blocks and block pattern cards. Ask the students to reproduce the block pattern cards with colored blocks by placing blocks on the cards.

* * *

ACTIVITY: "Oscar the Grouch"

MATERIALS NEEDED: One paper bag per child, several straws, crayon bits, etc.

PROCEDURE: Tell the students Oscar the Grouch left some "junk" at your door. "We want to sort it out to find out what he left." Have the students dump their junk and see what Oscar left them. When the students are through sorting, have them discuss what is worth saving and what is not.

* * *

ACTIVITY: Matching Games

MATERIALS NEEDED: Mittens, shoes, socks or other objects in pairs

PROCEDURE: Have the students match pairs such as pairs of mittens, shoes, or socks.

* * *

ACTIVITY: Clay Letters

MATERIALS NEEDED: Alphabet cards, clay

PROCEDURE: Make and laminate letter cards approximately six inches by six inches. The top or bottom of the card should be designated with a dot or line so that the students can work independently. The students roll and twist coils of clay to form letters. Encourage students to name the letter they are making.

* * *

ACTIVITY: Recognition of Word Forms

MATERIALS NEEDED: None

PROCEDURE: Help students identify word differences during dictation, name writing, chart making, or experience stories by remarks similar to the following:

"That word is long."
"This word only has three letters."
"This word has tall letters."

* * *

ACTIVITY: Picture Boards

MATERIALS NEEDED: Picture boards with four to six pictures on each, each picture labeled

PROCEDURE: Prepare several picture boards with four to six pictures each. Be sure each picture has its name printed on it. Ask students, individually, to point to the word you are talking about.

"I saw a house on fire. Show me the word fire."
"Yesterday my sister bought me some candy. Show me the word candy."

* * *

ACTIVITY: Photo Album

MATERIALS NEEDED: Camera, film, photo album

PROCEDURE: Take pictures of school activities. When the pictures are developed, place in photo album and let children tell what is happening in the picture. The teacher places the children's language on bubbles beside the picture.

* * *

ACTIVITY: "Let's Go On A Junk Hunt"

MATERIALS NEEDED: Zip-lock bag for each student

PROCEDURE: Take students on a walk around the school yard. Students pick up items which are not nature. They are to place in their bag any junk items they wish to keep. Back in the room, name and label all items found.

* * *

ACTIVITY: T-Shirt Day

MATERIALS NEEDED: T-shirts, paper, pencils

PROCEDURE: Each student is encouraged to wear a shirt with words on it. A word list is made of all words found on the t-shirts. All words beginning with the same letter are circled in one color. List words by categories: moving words, describing words, naming words, etc.

* * *

ACTIVITY: Class-Made Book

MATERIALS NEEDED: Book cover, page for each child

PROCEDURE: Each child is given a page and asked to illustrate an experience shared by the class. The teacher then writes the words on the page as the child explains his/her illustration. The pages are then collected and put together with the cover.

* * *

ACTIVITY: Child-Made Book

MATERIALS NEEDED: Book cover, pages for content

PROCEDURE: Each student is given a subject ("What Bugs Me", "My Favorite Things", "My Family", "Pets", "What Is a Pilgrim?", "Zoo Trip"). The teacher then writes down the child's words and the child illustrates.

* * *

ACTIVITY: Surprise Box

MATERIALS NEEDED: Small box, pictures

PROCEDURE: Children select pictures one-by-one from box. They must say the name of the picture and then say another word that begins with the same sound. They might use magazines to look for other pictures and add them to the box.

* * *

ACTIVITY: Sight Word Sentences

MATERIALS NEEDED: Flashcards of sight words

PROCEDURE: Students are provided with flashcards for sight words presented for specific week and are encouraged to construct numerous sentences through manipulation of flashcards. Note: Some provisions need to be made for keeping track of flashcards so that the future cards may be added to the student's set each week (individual boxes, cans, etc.).

* * *

ACTIVITY: Touchdown

MATERIALS NEEDED: Gameboard representing a football field, two paper footballs, word cards

PROCEDURE: This game can be varied by the word cards. The cards are placed face down. The students, divided into two teams, take turns drawing cards and reading them. The footballs, placed on the goal line, are advanced ten yards for each correct answer.

* * *

ACTIVITY: Mathematical Syllables

MATERIALS NEEDED: Cards on which are listed five multi-syllabic words

PROCEDURE: Make a list of five words and then draw a line below the words as if they formed an addition problem. Children add up the number of syllables in each of the five words.

* * *

ACTIVITY: "Quiz Show"

MATERIALS NEEDED: None

PROCEDURE: Children play a quiz game by answering questions concerning the number of syllables in words they know, such as follows:

"Who in our class has the most syllables in his/her name?"
"What kind of car can you name that has the most syllables?"

* * *

ACTIVITY: Family Circle

MATERIALS NEEDED: None

PROCEDURE: Children sit in a circle. The teacher begins the game by saying a word, such as game. The first child in the circle says a word that rhymes with it, and play progresses around the circle similarly. The teacher writes down the words as the children name them. When the "Family Circle" is completed, the children can note the similarities and differences in spelling.

* * *

ACTIVITY: Prefix-Suffix Tic-Tac-Toe

MATERIALS NEEDED: Teacher-made sheets of nine squares, each with three words having prefix and/or suffix

PROCEDURE: Children play in pairs, one being P for prefix and one being S for suffix. The first player chooses a square and finds the word that contains his/her word part. He/she must say the word and spell the prefix or suffix. If he/she is wrong, the square belongs to the other player. Play proceeds until either one wins by having the most squares.

* * *

ACTIVITY: "Finding the M.I."

MATERIALS NEEDED: Index cards with details and main idea

PROCEDURE: Children read all the sentences, then select the main idea. This could also be used as a sequencing activity, by having the details be logical only in sequence.

* * *

ACTIVITY: "On My Hand"

MATERIALS NEEDED: Newspapers or Weekly Readers, scissors

PROCEDURE: Children read selection from their reader; then they trace around their hand. The main idea of the story is written in the palm of the hand, and supporting details are written on each finger.

* * *

ACTIVITY: "Believe It or Not"

MATERIALS NEEDED: Index cards, folded in half, with facts from the Guinness Book of Records

PROCEDURE: Index cards are folded so that the three-inch sides meet. On the front is written "Did you know..." The question is written inside the card and the answer is on the back. Children read for a purpose to answer such questions as "How tall is the tallest living man?"

* * *

ACTIVITY: "Newspaper Headlines"

MATERIALS NEEDED: Newspapers or Weekly Readers, scissors

PROCEDURE: Children cut out articles from newspaper or Weekly Reader and cut the titles off. They then all lay them out and each child has a chance to select an article and find the headline that matches. (This could be self-correcting if the headlines were cut from the article using different zigzags and cutting patterns.)

* * *

ACTIVITY: Story Puzzles

MATERIALS NEEDED: Stories from old reader or children's magazine

PROCEDURE: Cut the stories apart in no more than ten separate pieces. Put each story in a separate envelope and direct the children to put them together in the correct order.

* * *

ACTIVITY: Cause Clauses

MATERIALS NEEDED: Sentence strips, cut into meaningful parts

PROCEDURE: Children match sentence parts by drawing conclusions.
Example: The boy lost his dog / and began to cry.
The school bus was late / so his mother drove him.

* * *

ACTIVITY: Analogies

MATERIALS NEEDED: Index cards with analogy on each

PROCEDURE: Children could write answer in blank on laminated cards.
Example: Boy is to girl as he is to _____.
Robin is to bird as red is to _____.

* * *

ACTIVITY: "Word-Of-The-Day Chart"

MATERIALS NEEDED: Large chart, cards for children's guesses

PROCEDURE: Select an unknown word from a sentence, comic strip, or cartoon and display both the source and the word. Each child has a chance to guess the definition of the word. When children have placed their individual cards in a "Definition Guesses" pocket on the chart, one child will look the definition up in the dictionary.

* * *

> Writing: The two facets of writing are the physical act of putting down symbols and the use of that act to express creativity. Language development for young children should include tangible expression of thought.

ACTIVITY: Molding Clay

MATERIALS NEEDED: Clay in a variety of textures and firmness, posterboard

PROCEDURE: Provide several teacher-made clays for variety in texture and firmness as well as plasticene modeling clay. Direct students to make balls and coils. Describe pinching, pulling, rolling, flattening, and shaping.

Draw and laminate letter and numeral cards for clay work. (6" x 7" is a workable size) Designate position with a line or dot on the card.

Have the students cut the clay with scissors. Mark the scissors so they are not confused with the scissors used for cutting clean paper. Allow the students to cut the clay freely.

* * *

ACTIVITY: Cookie Monster Bean Toss

MATERIALS NEEDED: Box, white felt or fabric, colored markers, brown felt or fabric

PROCEDURE: Draw the Cookie Monster's face, with mouth open, on one side of the box. Cut out mouth section. Use this box as the target. (Make six bean bag "cookies".) Make three "M & M" cookies (white felt or fabric with colored markers) and three chocolate chip cookies (bro felt or fabric with black marker). Two students, each with three cookies, take turns tossing cookies to the Cookie Monster. The student with the most cookies in the Cookie Monster wins.

* * *

ACTIVITY: Woodworking

MATERIALS NEEDED: Saw, hammer, nails, soft wood, wire, string, yarn, etc.

PROCEDURE: Provide an out-of-the-way spot for woodworking. Allow one student at a time to saw wood, hammer nails into piece of wood, nail boards together, and add wire, string, yarn to the wood.

* * *

ACTIVITY: Sewing

MATERIALS NEEDED: Meat trays, wire mesh (tape the edges), burlap (stretched on embroidery hoops), cardboard (punch holes with nails)

PROCEDURE: Stress going "in through the front door' and "out through the back door". Let the students draw designs, shapes, letters, or numerals to sew around. Provide patches of paper and fabric to sew onto the tray, wire, or other background.

Cut five-inch circles from cardboard, posterboard, or plastic. (Plastic lids work well.) Make five evenly-spaced, two-inch cuts from the edge to the center of the circle. Tie a length of yarn to the center. Have the student weave over and under in a continuous circle until the circle is covered. (Both sides will be covered with yarn.)

* * *

ACTIVITY: Manipulatives

MATERIALS NEEDED: Pegs and pegboards, Lincoln Logs, Tinkertoys, beads, parquetry

PROCEDURE: Provide any or all of the above commercially-made manipulatives. Direct activities or encourage creativity with use. Provide design cards for specific tasks after the students become familiar with a particular manipulative.

Let the students manipulate large and small blocks for counting and sorting, for use in dramatic play, and for building puppet stages, as well as their daily use in the block center.

* * *

ACTIVITY: Snaps and Button Doll

MATERIALS NEEDED: Fabric, fiberfill, buttons, snaps, yarn, embroidery thread, shoe laces.

PROCEDURE: Make a dressing doll for the classroom by first making a large, jointed rag doll and adding snaps, buttons and such where appropriate. Pieces needed: 2 hands (cut 4); 2 feet (cut 4); 8 limb segments (cut 16); 1 head (cut 2); 1 trunk (cut 2). Cut, stitch, and sew each segment, leaving an opening in each for stuffing. Fill each segment with fiberfill and close. Use bottons, yarn, and embroidery thread for facial features. Attach shoe laces to foot sections and buckle or button tasks on the trunk section. Sew snaps at joints. Have the student detach the parts and then reassemble the doll.

* * *

ACTIVITY: Puzzles

MATERIALS NEEDED: Puzzles

PROCEDURE: Have commercially-made puzzles available throughout the year. Rotate as often as possible. At any given time, offer puzzles with various levels of difficulty so that all students will be challenged.

* * *

ACTIVITY: Tying

MATERIALS NEEDED: Brightly-wrapped boxes, ribbon, yarn. Optional: wrapping paper

PROCEDURE: Add brightly-wrapped boxes to the pretend corner during holiday seasons. Provide the students with ribbon and yarn for tying on the packages. Older students may enjoy wrapping the boxes also.

Add sashes, ribbons, and neckties to dress-up clothes.

* * *

ACTIVITY: Finding the Lines and Spaces

MATERIALS NEEDED: Lined writing paper, breakfast cereal such as Cheerios, Tasteeos, Froot Loops, etc., which may be glued to represent placement of lower case o (between dotted line and solid bottom line), glue

PROCEDURE: Provide students with writing paper and cereal and instruct them to glue cereal so that the top of the o touches the dotted line and the bottom of the o touches the solid line beneath the dotted line. A demonstration will probably be beneficial. Students should also be encouraged to allow finger spaces between glued o's.

ACTIVITY: Scribbling

MATERIALS NEEDED: Crayons, chalk, felt-tip watercolor markers, butcher paper, tape

PROCEDURE: Focus on scribbling as a worthwhile design activity. Encourage broad strokes and full use of the paper. Supply crayons, chalk, and felt-tip watercolor markers for variety. Vary paper size. Large sheets of butcher paper can be used on the floor. (Tape down.)

* * *

ACTIVITY: Dipping and Pouring

MATERIALS NEEDED: Sand or water, spoons, measuring cups, and/or pitchers, food coloring, and/or soap. For variation, use rice, salt, cornmeal, or oats.

PROCEDURE: Let the students dip, measure, and pour sand or water. Use food coloring or soap in the water for diversity.

* * *

ACTIVITY: Stacking

MATERIALS NEEDED: Stacking cubes, rings, or blocks

PROCEDURE: Provide commercially-made stacking cubes, rings, or blocks. Ask the student to perform specific tasks. "Can you make a tower as tall as the chair?" "Can you make a purple stack taller than the green one?"

* * *

ACTIVITY: Cutting and Pasting

MATERIALS NEEDED: Variety of materials: construction paper, wallpaper, tissue, yarn, scissors, paste, string, foil, feathers, cloth, cotton, seeds, twigs, wood shapes, etc.

PROCEDURE: Encourage the students to be creative by providing a variety of materials, and letting them cut (if necessary) and paste the items on cardboard or pegboard.

Direct students to cut and paste specific things from magazines or catalogs: all red things, all toys, kitchen items, etc.

Give the student a small container such as a butter tub or cottage cheese carton with a lid. Write the students' names on the lids and decorate the tubs. Tell the students when the container is filled with "snips of paper," it may be taken home. Note: Explain this activity to the parent so that it has significance as a skill-building activity.

* * *

ACTIVITY: Tracing

MATERIALS NEEDED: Posterboard, felt-tip pen, laminating paper

PROCEDURE: Make and laminate design cards for the students to trace over. Adjust the complexity of the designs and the number per card to the age and developmental level of the students.

Make individual cards with the students' names printed on them. Have some tracing paper cut the same size as the name cards. Let the students place the tracing paper over their name card and trace their name.

* * *

ACTIVITY: Salt Writing

MATERIALS NEEDED: Pan, salt, sand, cornmeal, or oats

PROCEDURE: Provide a pan with salt, sand, cornmeal, or oats for writing. Encourage students to draw designs or make letters and numerals in the medium.

* * *

ACTIVITY: Chalkboard Writing

MATERIALS NEEDED: Chalkboard, chalk, eraser

PROCEDURE: Encourage drawing and writing on the chalkboard. Direct students to observe that writing is composed of lines and curves (circles).

Use the chalkboard for tracing activities with students who exhibit difficulties with dominance. Draw wavy or zigzag lines horizontally across the chalkboard two and one-half to three feet long. Have a student stand in the middle of the line. Direct the student to begin on the left and trace the line without moving the feet or changing hands. Note: Teacher supervision is a must for this activity.

* * *

CREATIVE WRITING

ACTIVITY: Writing Center

MATERIALS NEEDED: Paper, crayons, pencils

PROCEDURE: Provide a writing corner in the classroom with materials readily available to the students for informal writing.

Keep posterboard word cards available for words that students may request.

Encourage students to write down words they see in the room, such as classroom object labels, words from experience stories, names from helper chart, etc.

* * *

ACTIVITY: "How Would You Catch a Dragon?"

MATERIALS NEEDED: Paper, pencil

PROCEDURE: Suggest nonsensical themes for students to act out such as "How Would You Catch a Dragon?" Ask the students questions to spark their imaginations, such as "What would you do with a dragon if you caught one?" "What would you feed a dragon?" The students' ideas can also be recorded on paper cut in the shape of a dragon.

* * *

ACTIVITY: Add-On Story

MATERIALS NEEDED: Paper, pencil

PROCEDURE: Let the students add on to a story. Tell the students the beginning of a story and ask the students to add several sentences to the story. Let every student who wishes to do so contribute to the story.

* * *

ACTIVITY: Class Directory

MATERIALS NEEDED: Paper, pen

PROCEDURE: Make a class directory listing the students' whole names and addresses. Put the directory in the Book Corner or Pretend Corner for the students to look at and use.

* * *

ACTIVITY: Experience Stories

MATERIALS NEEDED: Paper, pen or pencil

PROCEDURE: Write down the students' reactions to science and cooking experiences, a new baby at home, a new animal in the room, the weather, and so forth. Experience stories can be written in a group situation or individually. Record the students' language on chart paper or put into a book form. Let the students illustrate their experience stories.

Take a tape recorder on field trips. Record students' reactions on the bus and on location. Include these ideas and feelings in an experience story.

Take photographs of events at school or other events that might interest the students. Have the students dictate several sentences or a story about the photographs.

Have the students tell about interesting news that has happened at school or at home. Record the news on paper; fold and put in an envelope. The newsletter can be mailed to another school or taken by a student chosen to be "mailperson" to another class in the building to share.

* * *

ACTIVITY: Stories and Titles

MATERIALS NEEDED: Typewriter, paper, crayons, felt-tip pens, pastels

PROCEDURE: Students supply story titles and dictate stories individually which teacher types on upper portion of page. Students use lower portion of page for illustrating their story with crayons, pastels, felt-tip pens, etc. If desired, stories can be displayed on bulletin board for authors to share and/or other students to read.

* * *

ACTIVITY: "Mailperson" Game

MATERIALS NEEDED: Posterboard, envelopes

PROCEDURE: Use posterboard to cut out houses with students' names and addresses on them. Address envelopes for the students to match to the names and addresses on the houses.

* * *

ACTIVITY: Poetry

MATERIALS NEEDED: Paper, pencils

PROCEDURE: Two-word peoms: Each line is only two words long and can be as many lines as desired. Example: Get started
Right now!
Write now!

Color poems: Think of your favorite color, then look around the room finding the color as many places as you can. List the places in sentences and the poem literally writes itself.

Haiku: Discuss the syllable form of this Japanese poetry and the fact that the subject is something in nature. Show the children examples of these poems and encourage their originality.

Name poems: Children describe themselves by writing their names down the lines of a page, letter-by-letter. Each descriptive word begins with one of the letters of their names.

* * *

ACTIVITY: Writing to Music

MATERIALS NEEDED: Record, record player, earphones, paper, pencils

PROCEDURE: Students listen to record (e.g., The Firebird by Stravinsky). The student then writes about the color the music makes him see or how the music makes him feel.

* * *

ACTIVITY: Story Wheel

MATERIALS NEEDED: Teacher-made wheel, paper, pencils

PROCEDURE: The teacher should make a wheel of four circles, one each for people, situations, places, and mood. The student closes his eyes and spins the wheels. The resulting combination of details is then used to develop a short story.

* * *

ACTIVITY: "Me, In Ten Words"

MATERIALS NEEDED: Paper, pencil, crayons, newspapers

PROCEDURE: Ask students to skim through newspapers and find ten words that describe themselves. Have them write the words down, then use them in a short autobiography or character sketch.

* * *

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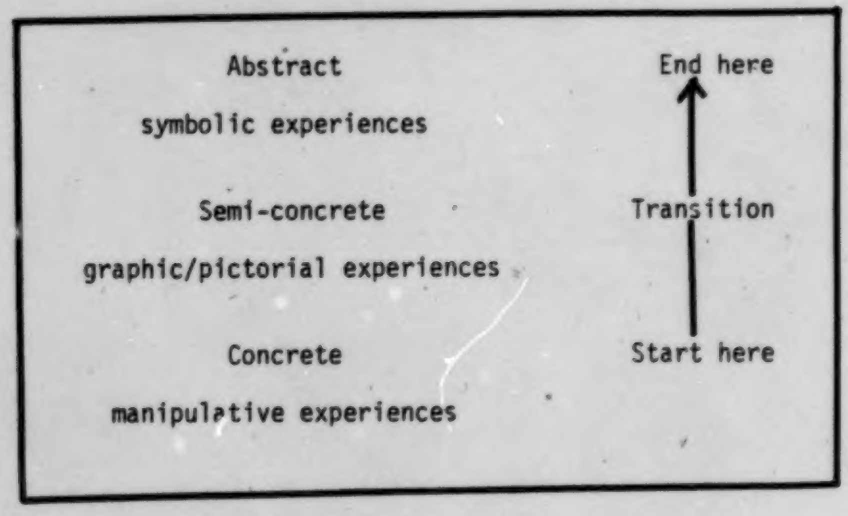
MATHEMATICS

Numbers experiences have been a part of children's environments long before they enter school. Mathematics should clarify basic understandings of the number system, numerical and quantitative relationships and stimulate and expand interest in the manipulation of mathematical processes. Interesting concepts relating to the history of the number systems are fascinating to young children.

The basic processes of math are learned through a child's manipulation of objects. In the past we have tried to teach answers of a particular response, rather than to develop logical thinking. Most children of four to seven years do not achieve operational thinking or reasoning ability through words but must do so through their own operations (experiences) in the physical world. Verbal instructions alone are not the answer.

The teacher becomes an important factor by providing an appropriate physical environment and asking appropriate questions when the child is ready for a higher level of thought. Educators must have a knowledge of the logical processes necessary before basic mathematics instruction will be effective and profitable. By the use of diagnostic tasks*, the teacher will recognize the optimum time for such procedures to be meaningful.

The following diagram shows the desired introductory teaching sequence for presenting mathematic concepts:



Teachers must be sensitive to children's individual rates of development and past experiences. If a child is having difficulty in the semi-concrete or abstract stage, the teacher should provide more concrete experiences for the child. Most children, nursery through second grade, need many, many concrete experiences with manipulatives before being expected to master abstract concepts.

*Fogelman, Piagetian Test for the Primary School (see bibliographic reference section at the back of this guide).

ACTIVITIES

ACTIVITY: Sandpaper Shapes

MATERIALS: Sandpaper, posterboard

PROCEDURE: Cut shapes from sandpaper and mount on cards. Have the children trace the shape with their fingers. Variation: have the children close their eyes and trace the shape and name it.

* * *

ACTIVITY: Fraction Food

MATERIALS: Apples, sandwiches, pie, cake, etc.

PROCEDURE: Show the children a whole apple. Discuss with them how two children can share the apple. Divide the apple in half and give each child a half. Discuss ways to divide the apple so that three children can share it. Do the same with four children and so forth.

* * *

ACTIVITY: Shapes in Sports

MATERIALS: Paper, pencils, pens, etc.

PROCEDURE: Have a small group of youngsters do a study of the tools and equipment used in various sports. The group should list the sport, identify the tools or equipment used (i.e., baseball: round ball, diamond field, square bases) and the shape of the tools. Variation: Ask the group of children to suggest changes in the shapes of the tools used in various sports. Have them explain how this might change the game.

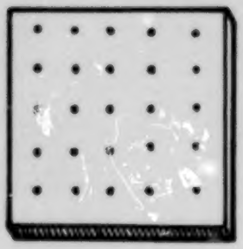
* * *

ACTIVITY: Geoboards

MATERIALS: Geoboards, rubber bands

Note: If you do not have geoboards, you may construct one as follows:

Materials: Wooden 3/4 inch thick board, 12 inches square; 25 nails, one to one and one-half inches long. Hammer the nails into (but not through) the board in a five by five array.



PROCEDURE: Note: Geoboards are an important manipulative for early childhood learners, but safety procedures should be established and reinforced.

Use a rubber band to make a square shape, and ask the children to make a shape just like the one you made. Do the same thing with other shapes. Name each shape as you make it. Let children experiment with the shapes they can make and help them make them.

Variation: After the children have had an opportunity to make shapes with the teacher present to help them, make some task cards with the different shapes on them. Children look at the shape on the card and reproduce it on the geoboard with rubberbands.
Challenge of challenges:
Have task cards with the name of the shape on one side. Draw the shape lightly on the back for self-check. Children select a task card, read the shape name, reproduce the shape from memory on the geoboard, and then check their work by flipping over the task card.

The geoboard can be used to teach concepts such as classifying shapes, measuring area, and changing from one shape to another.

* * *

ACTIVITY: Shapes in Clothing

MATERIALS: Paper, marking pens, etc.

PROCEDURE: Have students find geometric shapes in their clothing. Let them design a pattern to be used for clothing. This should be done first on paper and then transferred to cloth. Set up a display of the finished samples.

ACTIVITY: Sets

MATERIALS: None

PROCEDURE: Dismiss the children for juice, bathroom or lunch by using the terminology "The set of children wearing sweaters may line up," or "The set of boys may go back to work."

* * *

ACTIVITY: Color Chips

MATERIALS: Color chips, muffin pan, plastic counters, beans, dominoes, buttons

PROCEDURE: Have the children sort the chips by color into muffin pan.

* * *

ACTIVITY: Nonequivalent Sets

MATERIALS: Attribute game, circles for boundaries

PROCEDURE: Make two equivalent sets. Add a component to one of the sets and talk about how they are different. Ask: "How are the two sets different?"

* * *

ACTIVITY: Equivalent Sets

MATERIALS: Any objects, circles to form boundaries, attribute game or shapes of various sizes cut from different colored posterboard.

PROCEDURE: Allow the children to build equivalent sets by matching the pieces of each set. As the child progresses, point out that equivalent sets may have different identifying characteristics (i.e., a set of four buttons and a set of four blocks are still equivalent).

* * *

ACTIVITY: Empty Set

MATERIALS: Baby food jars, buttons, rocks, etc.

PROCEDURE: Use materials to demonstrate an empty set. Use the phrase "empty set". Drop objects into jars behind a screen. Have students listen to determine an empty set. Objects may be used visually also.

* * *

ACTIVITY: Odd and Even Bees

MATERIALS: Draw two bee hives. Color, cut out the hives and mount them on a sheet of tagboard. Draw twelve bees. Print one of the following numbers on each bee:

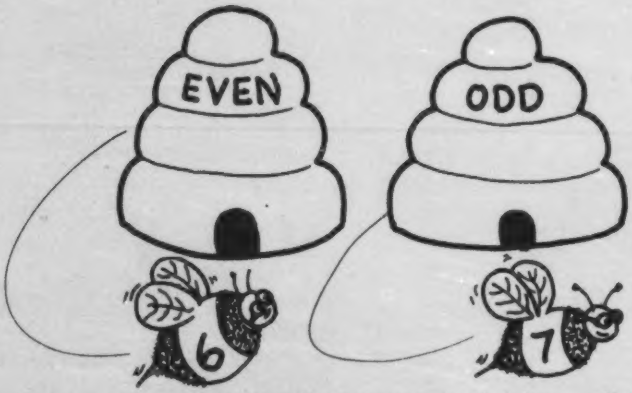
Answer Key

Odd

5 7 99 11 79 15

Even

6 8 66 12 80 90



PROCEDURE: "The bees are trying to find the right hive. Help the bees decide where to go. Decide if their numbers are odd or even and match them to the correct hive.

Print the above instructions on a large envelope. Place the bees and hives in the envelope. Children can check their work with the answer key. (one to two players)

* * *

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ACTIVITY: Sequence Game

MATERIALS: Several yellow triangles, red circles, blue squares

PROCEDURE: Display a yellow triangle, a red circle and a blue square. Then add another yellow triangle, a red circle and ask, "What comes next?"

* * *

ACTIVITY: Patterning

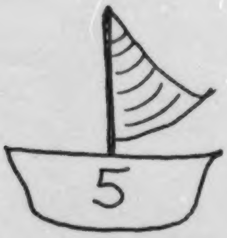
MATERIALS: Pattern blocks, unifix cubes, inch cubes, parquetry blocks, cuisenaire rods, nature objects (rocks, twigs, seeds, etc.), chairs, students, colored paper shapes, colored macaroni, fishing line (for stringing beads or macaroni), attribute materials (A-Blocks, People Pieces, Colored Cubes)

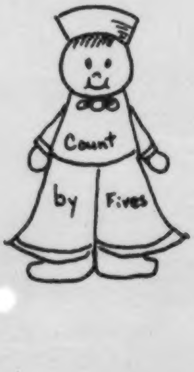
PROCEDURE: Students construct pattern using two, three, four or more variables. Extensions might include construction of patterns which are: closed, open, identical, opposite, reversed, etc. When parties occur throughout the school year, students may be encouraged or may choose to pattern borders on placemats. Mary Baratta-Lorton's Mathematics Their Way (Reading, Mass.: Addison-Wesley Publishing Company, 1976) has an excellent section related to patterning activities for early childhood students.

* * *

ACTIVITY: Sailor Dan

MATERIALS: Draw Sailor Dan on tagboard. Cut out. Draw twenty ships on tagboard. Label each ship with a multiple of five (5, 10, 15, 20, . . . 100)





PROCEDURE: Sailor Dan must place all ships in order before they are inspected. Look at all the numbers on the ships. Count by five and place them in the correct sequence. Check your work by using the answer key:

Answer Key

5 10 15 20 25 30 35 40 45 50 55
60 65 70 75 80 85 90 95 100

* * *

ACTIVITY: Bunny and His Carrots

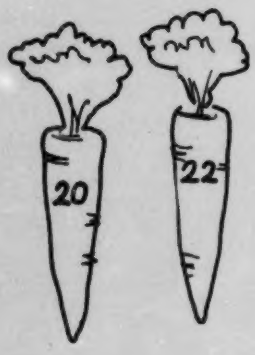
MATERIALS: Use tagboard to make a bunny and twelve carrots. Color them attractively. Print one of the following numbers on each carrot:

Answer Key

20 22 24 26 28 30 32
34 36 38 40 42

PROCEDURE: "Ronnie Rabbit loves to eat carrots, but he will only eat them if they are in order counting by two. You can help Ronnie. Start with the twenty and arrange the carrots by two. Don't try to eat any of the carrots because Ronnie is watching you. Check your order by using the answer key in the learning activity container."

Cover a pringle can with pretty contact paper. Place rabbit and carrot in the can. Tape instructions on can and seal with lid.



ACTIVITY: Yarn Game

MATERIALS: Pieces of yarn cut in various lengths

PROCEDURE: Hang pieces of yarn in the front of the room. Ask "Which is the longest?" "Which is the shortest?" Children may arrange the yarn by lengths from shortest to longest.

* * *

ACTIVITY: Ordering Numbers 0-10

MATERIALS: Clothesline, real or paper socks with numerals 0-10 on them, clothespins

PROCEDURE: Hang a clothesline across one end of the room. Provide the children with the socks and the clothespins,and let the students order the numbers by hanging the socks.

* * *

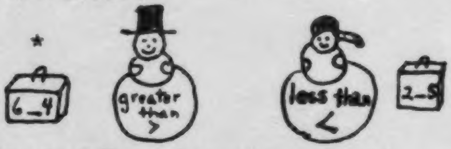
ACTIVITY: Seriation

MATERIALS: Dowels of various length and diameters (SCIS Material Objects), cuisenaire rods, colored chips, (SCIS Beginnings), or cut brochures of paint color samples, shells, rocks, twigs, unifix cubes, lids, vegetables such as carrots, zucchini, cucumbers, measuring utensils such as spoons, cups, hair rollers, paper tubes, shoes, socks, buttons, classroom objects such as crayons, straws, pieces of chalk, used pencils

PROCEDURE: Students are provided objects for purposes of ordering by graduated property(ies). Extensions might include drawing around bottle lids of various diameters, then cutting and gluing on paper strip in serial order; drawing pictures which reflect serial order; forming clay into objects and placing in serial order.

* * *

ACTIVITY: Mr. and Mrs. Snowman



MATERIALS: Draw, color, and cut out Mr. and Mrs. Snowman. Draw, color, and cut out ten suitcases and label each with the following:

Greater than	Less than
6__4 2__1 8__5	2__5 7__8 11__15
11__9 18__14	16__19 7__10

ACTIVITY: How Many Game

MATERIALS: None

PROCEDURE: The children can tell how many of each body parts their bodies have. Ask: "How many noses do you have? How many eyes? How many ears? How many chins?" When you get to the fingers, count how many on each hand. Do the same thing with the toes.

* * *

ACTIVITY: Drop the Number

MATERIALS: Cans, objects such as rocks, buttons

PROCEDURE: Put a lid in the side of a tubular potato chip can or similar container. Have the child count and drop objects such as buttons, checkers, or pennies through the slit. Then remove the lid and recount what is in the can.

* * *

ACTIVITY: Move to the Number

MATERIALS: One set of large number cards and several sets of matching smaller number cards

PROCEDURE: Distribute the smaller cards to the children. Put one of the large number cards in a prominent place and ask all of the children with the matching number card to hop, jump, etc. the number of times indicated on their card.

* * *

ACTIVITY: Clay Numerals

MATERIALS: Clay, cardboard with written numerals, felt-tip marker

PROCEDURE: Have the children outline the numerals with clay on a piece of cardboard with the number already printed on it. Have the child use clay to represent the number of objects the numeral represents.

* * *

ACTIVITY: Trees and Apples

MATERIALS: Red, green, and brown felt pieces, five pieces six inch x nine inch tagboard and glue, storage box

PROCEDURE: Cut trees, apples and numerals out of the felt. Glue a tree onto each piece of tagboard. The child will place a numeral on the trunk of each tree. Then he/she will place the appropriate number of apples on the tree.

* * *

ACTIVITY: Numeral/Number Relationship Stations

MATERIALS: Beans, toothpicks, jewels, parquetry blocks, pattern blocks, cuisenaire rods, unifix cubes, inch cubes, multilinks, junk boxes of plastic or metal objects, etc.

PROCEDURE: Manipulatives are provided at various tables, stations or centers (preferably one manipulative per area). Students move from manipulative to manipulative creating designs, patterns or clusters containing numeral being introduced. An extension for review might include placement of various numerals at tables, stations or centers. Students must read numeral and then record data by pairing numeral with manipulative to represent number.

* * *

ACTIVITY: Math Recording Game

MATERIALS: Six inch x six inch squares of tagboard or cardboard, objects to form sets (rocks, pegs, buttons, corks, paper clips, flashcubes, stickers, etc.), glue, magic markers, strips of paper and pencils, storage box for materials

PROCEDURE: On each card, glue a set of objects and at the bottom of the card print the name of the objects. The child will take each card and count the number of objects on the card. Then he/she will take a strip of paper and print the number and the name of the objects on the paper and place it under the card. He/she will repeat the procedure until he/she has used each card.

* * *

ACTIVITY: Colored Eggs-The Number That Comes Before

MATERIALS: Straw basket or egg carton, ten small plastic colored eggs which have been labeled with different numerals, slips of paper inserted inside eggs which have numerals written on them which come before the labeled numerals on the eggs.

PROCEDURE: Place eggs in basket or carton.

Two children take turns. One child draws an egg and reads the numeral on the egg. Then the child tells what numeral comes before the numeral on the egg. To check the answer, the child opens the egg and reads the answer which is written on the slip of paper inside. If the child says the correct answer, he/she may keep the egg until the end of the game. The child with the most eggs at the end of the game wins. Variation: One child may play alone.

* * *

ACTIVITY: Numeration-Writing Grids (100's, 1000's, etc.)

MATERIALS: Chalk, chalkboard or other method of displaying data such as overhead projector, viewing screen, grease pencils, transparencies

PROCEDURE: Once students can rote count past 10, have students record numerals in rows: 1-9; 10-19; 20-29, etc. Students should be encouraged to look for patterns. If patterning has been a fundamental part of the mathematic experiences throughout the year, students should quickly begin to draw upon patterning skills to organize numeration tasks. Mary Baratta-Lorton's *Mathematics Their Way* (Reading, MA: Addison-Wesley Publishing Co., 1976) has many exciting patterning activities which are appropriate for young learners as well as numeration activities.

* * *

ACTIVITY: Lost Gingerbread Boys

MATERIALS: Draw and cut out ten gingerbread houses and ten gingerbread men. Label each piece with the following information:

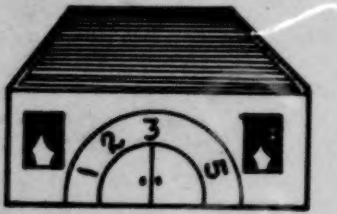
Answer Key

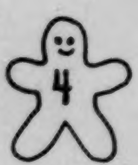
Gingerbread Boys: 6, 9, 14, 36, 45, 50, 62, 68, 89, 91
Gingerbread Houses: (3, 4, 5, __, 7) (6, 7, 8, __)
(11, 12, 13, __, 15) (34, 35, __, 37)
(44, __, 46, 47) (48, 49, __, 51)

MATERIALS: (cont'd)

(59. 60, 61, __) (76, 77, __, 79)
(86, 87, 88, __) (89, 90, __, 92)

Print the correct answer on the back of each house so students can check their work.



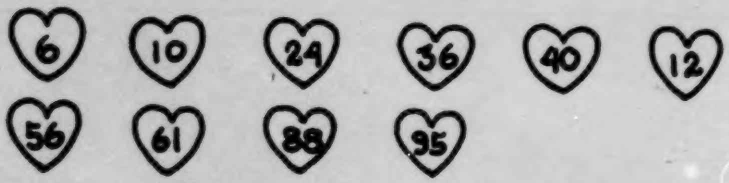


PROCEDURE: "The little gingerbread boy is very tired from all his running. Can you help him find his correct gingerbread house where he will be safe? Match the number on the gingerbread boy to the missing number on each house. Check your work by looking on the back of each house."

* * *

ACTIVITY: Hearts in the Candy Box

MATERIALS: An empty heart-shaped candy box or an empty box covered with red and white contact paper, ten small hearts cut out of red paper each labeled with a different numeral:



PROCEDURE: Place hearts in candy box. Two children take turns. The first child draws a heart and reads the numeral on the heart. Then the child tells what numeral comes after the numeral on the heart. To check the answer, the child may look at the answer key which is on the bottom of the box.

Variation:
One child
may play
alone.

Answer Key

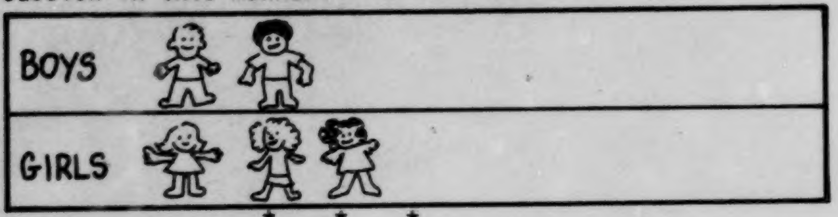
	After		After
6	7	12	13
10	11	56	57
24	25	61	62
36	37	88	89
40	41	95	96

* * *

ACTIVITY: Interpreting Information from a Picture Graph

MATERIALS: A picture graph of the number of boys and girls in the class for the bulletin board. Each child can draw a small image of her/himself, cut out the image and paste it onto the large sheet.

PROCEDURE: Lead a class discussion on how many boys' images are on the graph and how many boys are in the class, then do the same with the number of girls. Try to stimulate a class discussion in this manner.



* * *

ACTIVITY: Bus and Walker's Graph

MATERIALS: A large piece of tagboard with the children's names printed down one side of the tagboard and the bus numbers and the word walkers printed across the top of the graph, a magic marker

PROCEDURE: This could be a good beginning of the year activity to ease the minds of the children who are concerned with how they will get home at the end of the school day. Each child can tell the teacher how he/she is to get home from school and the teacher can record his/her name in the proper place on the graph. During large group time, the teacher can display the graph and lead a discussion on the different ways to get home and each child can tell how he/she will get home.

* * *

ACTIVITY: Graphing

MATERIALS: Butcher paper, crayons, marking pens, etc.

PROCEDURE: Prepare graphs for students to record data:

EXAMPLE:

COLORS

☐ blue ☐ red ☐ yellow ☐ green

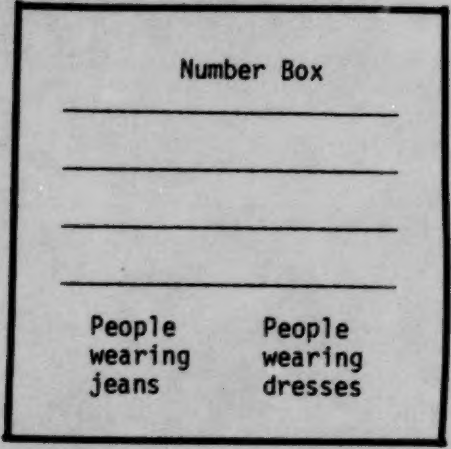
Students construct bar graph by coloring one rectangle each per student from bottom to top to indicate color preferences. By varying colors to indicate specific groups (i.e., boys use orange; girls use violet), opportunities for data comparisons are increased. Mary Baratta-Lorton's Mathematics Their Way (Reading, Mass.: Addison-Wesley Publishing Company, 1976) contains exciting, developmentally appropriate activities for early childhood students.

* * *

ACTIVITY: Clothes

MATERIALS: Graphing investigation sheet

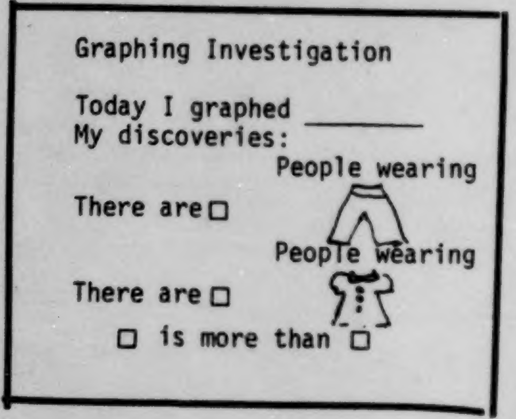
PROCEDURE: Students complete the worksheet by looking at their friends wearing jeans and dresses. Place the worksheets in activity envelope. Write the following instructions on the outside of the envelope: "Color in each number box after filling out the investigation sheet."



Number Box

People wearing jeans

People wearing dresses



Graphing Investigation

Today I graphed ________

My discoveries:

There are ☐ People wearing

There are ☐ People wearing

☐ is more than ☐

This can also be done with favorite T. V. shows, beads, cars, animals, pencils, erasers, bottle caps, etc.

* * *

ACTIVITY: The Three Bears

MATERIALS: Cut-outs for different sizes of chairs, bears, bowls, beds, etc. (flannel-board)

PROCEDURE: Tell the story, The Three Bears. After the story, let the children match the cut-out objects with the small (baby) bear, medium-sized (mama) bear and big (papa) bear.

* * *

ACTIVITY: Measuring with Construction Paper Hands

MATERIALS: Construction paper hands

PROCEDURE: Children are allowed to freely measure objects (or persons) by laying out hands next to the object and counting. The child may dictate a sentence saying, "This table is ten hands long." Variation: use blocks, small dowel rods, or metric sticks. Repeat same procedure with other measuring units. If metric measurements are used, help the child to use the correct name for the unit of measurement.

* * *

ACTIVITY: Measuring

MATERIALS: Measuring cups, measuring spoons

PROCEDURE: Provide measuring cups and measuring spoons for sand and water play.

* * *

ACTIVITY: Measurement of Weight

MATERIALS: Various objects, comparison balance scales

PROCEDURE: After discussing, comparing and predicting weights help the students weigh various objects on scales. They can weigh classmates, teachers, books, toys, puzzles, etc.

* * *

ACTIVITY: Measuring with a Stick

MATERIALS: Provide sticks for children to measure with.

* * *

PROCEDURE: Find some things which are exactly the same length as this stick. Is the room longer than it is wide? How can you find out? Are you a square? Are you as tall as you are wide with arms outstretched? If children have sticks of varying lengths, they will soon discover the advantage of having a standard unit of measurement.

* * *

ACTIVITY: Meter Strips, Meter Snakes*

MATERIALS: Cut strips of paper which are one meter long and eight centimeters wide, clay, crayons, pencils, reference books related to snakes or encyclopedias.

PROCEDURE: Students are provided cut meter strips and instructed to search the classroom, their homes, etc. for objects, surfaces, etc. which are a meter in length, height, or width. Extensions might include recording drawings of items of surfaces which are a meter in length, height, or width. Meter snakes: Students are provided clay and cut meter strips for purposes of constructing clay snakes which are a meter in length. As snakes are constructed, snakes may be laid on top of meter strip, and its outline traced. Students might choose to color snakes. Some students may wish to consult references related to snakes, their colorings, markings, etc.

* * *

ACTIVITY: Volume Measurement/Area Measurement

MATERIALS: Milk cartons of several sizes: one-half pint, one pint, one quart, one-half gallon, one gallon, a bucket of water, cup for dipping, geoboards and rubber bands

PROCEDURE: Let children experiment and make discoveries on their own for equivalences. Variation/extention: Make a list of things you can buy in pints, quarts, gallons, square feet, square yards.

* * *

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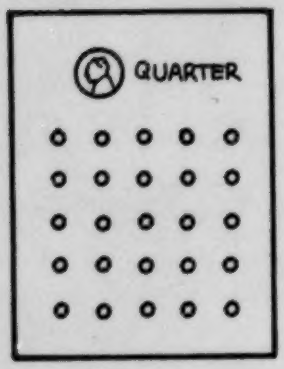
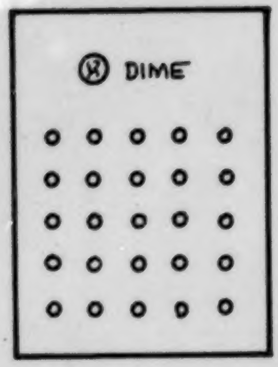
ACTIVITY: Money Boards*

MATERIALS: Prepare money boards by using five pieces of tagboard. On each piece of board, tape or glue a different coin (quarter, dime, half-dollar, etc.) at the top. Then circle the number of pennies on the board that it takes to make the equivalent of the coin.

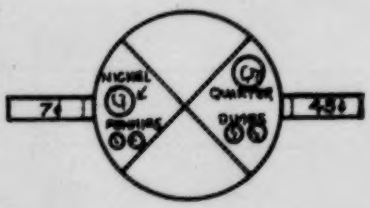




PROCEDURE: The student selects a card and matches pennies to the circles. This helps reinforce coin value concepts.

* * *

ACTIVITY: Pizza Board Match



MATERIALS: Use a pizza board. Divide it into sections using a magic marker. Glue pictures of different groups of coins in the sections. Write the sum of the coins on clothespins. For self-checking, write the answers on the back of the sections of the pizza board.

PROCEDURE: Child looks at the coins in one section at a time. He/she figures what the total amount of the coins would be. Then he/she finds the clothespin with the correct answer on it and clips it on the board. Variation: Several different boards could be made to accommodate various levels of difficulty.

* * *

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ACTIVITY: Coupons and Advertisement

MATERIALS: Coupons, newspapers or magazines containing coupons, weekend food or drug store newspaper supplements, coin stamps, real coins, workbook punch-out coin supplements, duplicated paper coins, crayons, scissors, glue, ink pad, paper, store items, slips of paper.

PROCEDURE: Students select ads or coupons and glue to upper left portion of page. On lower or right portion of page, student records value of coupon or ad by: ink stamping coins, crayon rubbins or real coins, tracing around coins, gluing workbook supplement coins or duplicated paper coins. When appropriate, students should be encouraged to use coin combinations. Extensions might include designating prices for mock store items (empty cans, boxes, etc.). Students might create or design discount coupons or ads. When students present coupons or ads at mock store center, change could be indicated on slips by stamping coins, gluing, or crayon rubbings, and returned to customer with purchased store items.

* * *

ACTIVITY: Menus and Money

MATERIALS: Menus from various restaurants, fast food chains, local specialty restaurants, etc.

PROCEDURE: Have the children compare prices of foods on the menus. Which is the least expensive place to eat? Let the children have time to use dramatic play: Let someone be a waitress/waiter, customer, cashier.

* * *

ACTIVITY: Christmas Catalog Shopping

MATERIALS: Christmas catalogs, pencils, paper

PROCEDURE: Designate a certain amount of money for the students to spend for Christmas. Buy a gift for each one of your family. Choose items that will not total over the amount of money you have to spend.

* * *

ACTIVITY: Calendar Time

MATERIALS: Calendar, numbers for each day

PROCEDURE: Place a calendar where the children can see and reach it. Time is spent each day placing numbers on the calendar and talking about which day is today, which day is yesterday, which day is tomorrow, and what we did last month, etc.

* * *

ACTIVITY: Paper Clocks

MATERIALS: Three pieces of large tagboard and contact paper, red and black magic markers, one box of brads, storage box for clocks, Walt Disney - Learning To Tell Time Is Fun - No. 1263, Hap Palmer - Learning Basic Skills Through Music - Vol. 2

PROCEDURE: Make faces and hands of the clocks out of tagboard. Color the hands of the clocks red and print the numerals on the face of each clock with a black magic marker. Laminate or use contact paper to cover the clocks and the hands. Cut out the faces and hands of the clocks and attach the hands to the clock with a brad. The records have songs which will direct the children in how to use the clocks.

* * *

ACTIVITY: Telling Time Pockets (bulletin board activity)

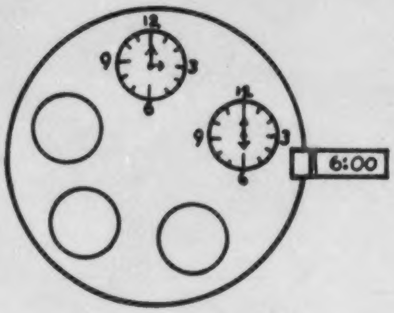
MATERIALS: Two large sheets of tagboard, library book pockets, magic marker or clock stamp, large pocket made from tagboard, small cards made from tagboard

PROCEDURE: Take one large sheet of tagboard and glue the library book pockets onto it. Each library pocket should have a clock face on it with the hands pointing to a certain hour or half hour. Staple or tack this board onto the bulletin board. On the small tagboard cards print various times on each card to correspond to a clock on the pockets. Also make a large pocket from tagboard to keep the small cards in and staple it also onto the bulletin board. The child will then select a card from the large pocket and place it into the pocket which has a clock telling that specific time.

* * *

ACTIVITY: Pizza Time Practice

MATERIALS: Use a medium-size pizza or cake board. Cut small clock faces out of old math worksheets. Glue these around the outer edge of the pizza board. Use clothespins and label them with the correct time for each clock face. Provide a box for clothespins. Cover pizza board with clear contact.

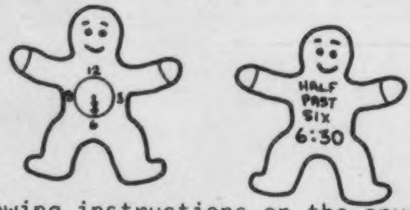


PROCEDURE: The child chooses a pizza board and clips a clothespin on each of the clock faces, so that each clothespin gives the time shown on the clock face to which it is attached. Write the correct answer on the back of the board for self-checking.

* * *

ACTIVITY: Gingerbread Twins*

MATERIALS: Cover a large brown envelope 12" x 9" with contact paper. Make fourteen gingerbread boys. Label seven of them with a time showing the half past hour. Label the other seven with the corresponding time. Cover the gingerbread boys with clear contact or laminate.



PROCEDURE: Write the following instructions on the envelope. "These gingerbread men always like to be on time. Help the gingerbread boys find their twin. Read the time on the one with the clock face and match it with its correct twin. Check your answer on the back of the gingerbread boy wearing the clock face. Watch out! These gingerbread boys may try to run away!"

* * *

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ACTIVITY: Place Value

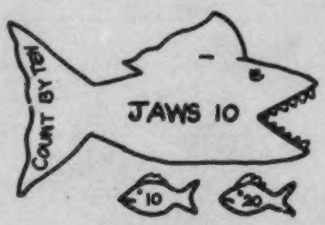
MATERIALS: Unifix cubes, place value boards, place value flips, place value strips

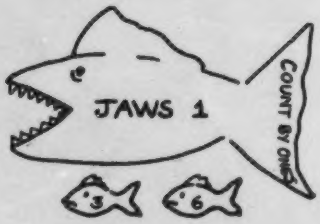
PROCEDURE: Place value boards are prepared so that they are divided in half by differing colors. Students place unifix cubes one by one on right side until ten cubes have been placed on right side. At that time, unifix cubes which are hooked together, are moved to left side to form a ten. Extensions might include adding flips to right and left side of board which are manipulated to pair numerals with numbers shown with manipulatives. Paper strips may also be prepared for recording notation shown by flips. Mary Baratta-Lorton's *Mathematics Their Way* (Reading, Mass: Addison-Wesley Publishing Company, 1976) comes with black lined masters for duplicating place value strips. The manual gives excellent step by step procedures for teaching place value to early childhood learners. The activity described is taken from one of numerous sequential activities related to this concept. The activities also allow students to have concrete experiences with carrying in addition and borrowing in subtraction.

* * *

ACTIVITY: Jaws One, Jaws Ten

MATERIALS: Draw Jaws One, Jaws Ten on tagboard. Cut out. Draw and cut out twenty-one little fish. Label each little fish with numerals (ones or tens place).





PROCEDURE: Jaws One and Jaws Ten are very hungry. If you can count by ones and by tens, you can help them eat the correct fish. Jaws One will only eat the fish you put in order counting by ones. Jaws Ten will only eat the fish you put in order counting by tens. Help make Jaws One and Jaws Ten happy by feeding them the correct fish. Write answers on back of Jaws for self-checking.

* * *

ACTIVITY: Joining Student Sets/Joining Bead Sets

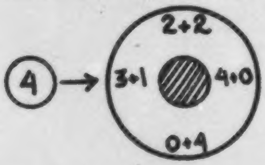
MATERIALS: Strings and various colored beads

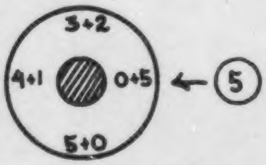
PROCEDURE: Let the students act out addition of two sets. Call three girls to the front to act as a set of three. Call two boys to the front to act as a set of two. Ask questions of the class such as: "How many children do we have in this set?" (Point to the girls.) "How many children do we have in this set?" (Point to the boys.) "How many children do we have if we put the two sets together?" (Have a child count the two groups together.) Next have the two sets join hands for boy-girl-boy-girl-girl arrangement. Then ask questions like: "Are the two sets the same size? Which set is bigger, boys or girls?" "How many more boys would we need to have come forward to make the sets the same size?" Note: this activity works equally well for subtraction. Variation: Show the students a string of five blue beads and a string with eight red beads. Let someone unstring the beads to match up the beads blue to red. Ask questions about the string with the most beads. Repeat the activity with different colored beads and different amounts.

* * *

ACTIVITY: Donuts and Holes

MATERIALS: Using tagboard, cut out ten donuts with a diameter of six inches. Cut ten holes out of the donuts. Label the donuts and holes as follows:





Donuts:	Holes
(2+2, 3+1, 0+4, 4+0)	4
(4+1, 3+2, 0+5. 5+0)	5
(6+0, 3+3, 4+2, 5+1)	6

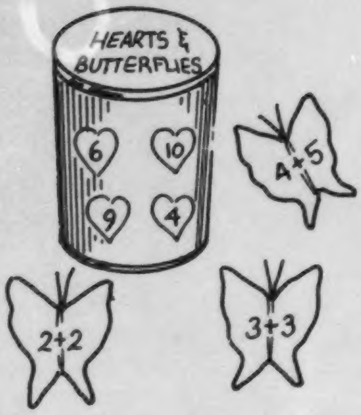
Continue labeling donuts and holes with the addition facts to be emphasized.

PROCEDURE: Children read the math facts on a donut and find the holes with the correct answer. Color code the backs of the corresponding donuts and holes for self-checking.

* * *

ACTIVITY: Hearts and Butterflies

MATERIALS: Cover a large metal coffee can with red and white checked contact paper. Next trace heart shapes all over the sides of the can. Write numbers in the hearts. Using tagboard, cut out enough butterflies to match the number of hearts. Write number combinations on the butterflies. On the back of the butterflies, glue a small strip (½") of magnetic tape. This can be purchased in the hardware section of a store. Make sure the number combinations on the butterflies match the answers on the hearts. Place answer key on slip of paper inside can.



PROCEDURE: Children match the butterfly number combinations to the correct heart answer on can. The butterflies will hold since the magnet is on the back. Butterflies can be stored in can.

* * *

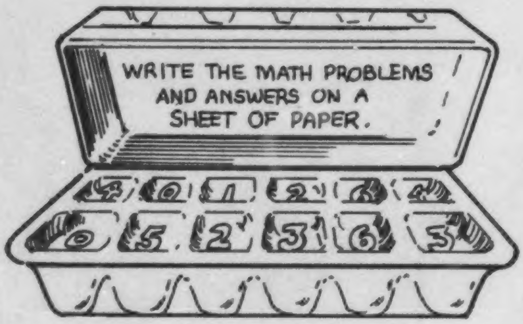
ACTIVITY: Shake and Add

MATERIALS: Egg carton with lid, two very small balls

Cover the top of an egg carton with a piece of solid colored contact paper. Print these instructions on top of the egg cartons:

Inside the carton write numbers on the bottom of the spaces where eggs normally rest. Write directions on inside of lid as shown below:

SHAKE AND ADD!
SHAKE THE EGG CARTON. LOOK INSIDE. WHAT NUMBERS DID THE BALLS LAND ON? ADD THE NUMBERS.


WRITE THE MATH PROBLEMS AND ANSWERS ON A SHEET OF PAPER.

PROCEDURE: Children can work in pairs or alone. Shake the carton and look inside. What numbers did the balls land on? Add the numbers together. Write the number sentences and answers on your paper.

* * *

Subtraction

ACTIVITY: Basket of Fruit (Oranges or Apples)

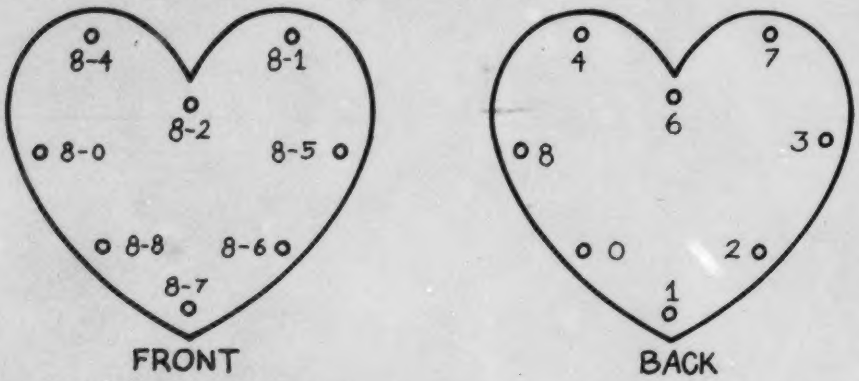
MATERIALS: Basket of five oranges or apples

PROCEDURE: Have child count apples being placed in basket. Call another child up to take out so many apples and put them on table, then count how many left in basket (with basket titled so all can check).

* * *

ACTIVITY: Valentine Poke and Peek

MATERIALS: Using red or pink tagboard, cut out several hearts. Punch holes with a hole puncher around the outer edge. Write the subtraction combinations beside the holes. Write the answers on the back beside the appropriate hole. Laminate the hearts. Repunch the holes.

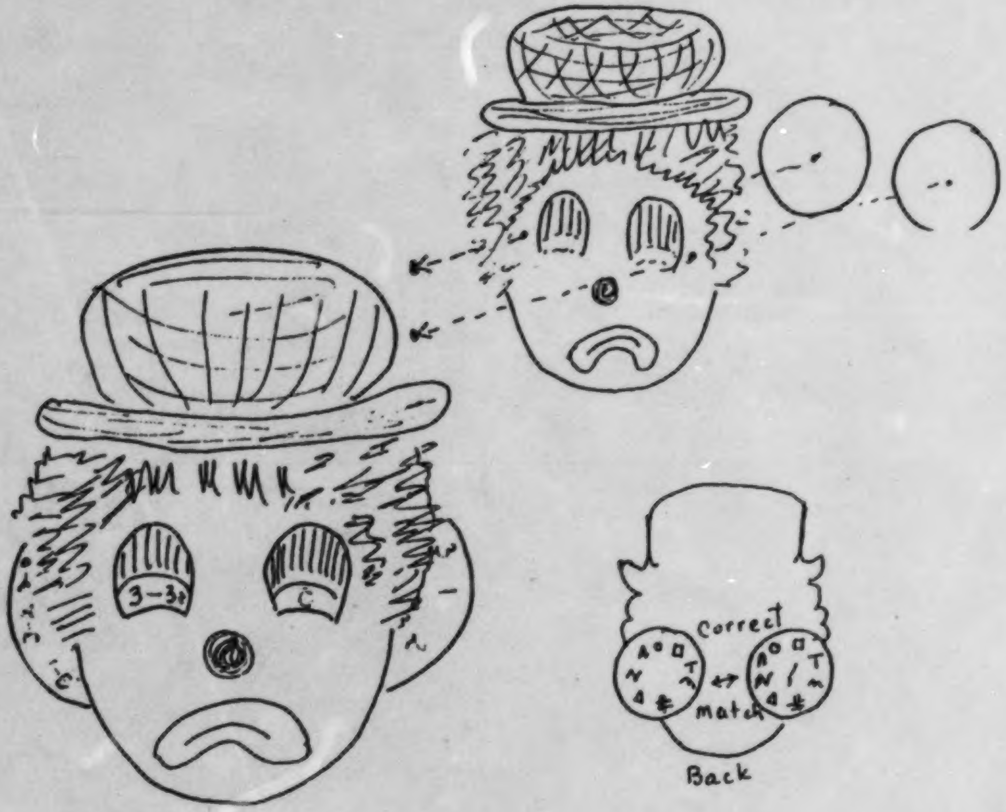


PROCEDURE: Two children can work together. The student in front of the picture pokes a pencil through the hole and repeats the problem giving the answer (i.e., 8-4 = 4). The student in the back of the heart sees which hole the pencil is in and checks the number beside the hole to see if the correct answer was given (i.e., 8). Students change places. Variation: Other cards can be easily made for other seasons: (i.e., Christmas trees, shamrocks, or animals from coloring books).

* * *

ACTIVITY: Matching Wheels

MATERIALS: Cut out a character face. With a blade or exacto knife, cut out the openings where the eyes would be located. Make wheels to fit behind the eyes. To make sure of correct positioning of wheels to face, use a straight pin or compass point to pin in place. Punch holes through the pinholes. Setting grommets (metal eyelets) in these holes prevents tearing and allows for an easier spin. Insert brads through holes.

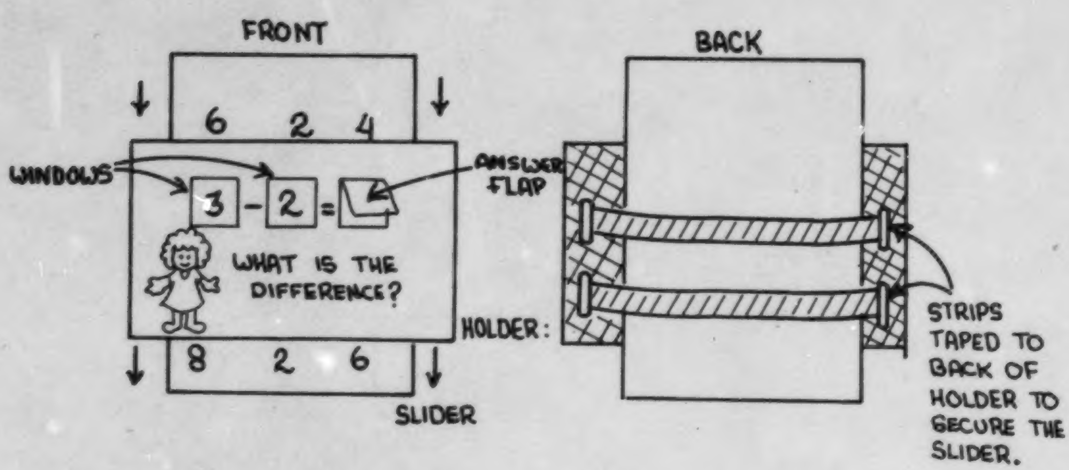


PROCEDURE: Children match wheels to find the corresponding number sentence and answer. Sets of wheels can be color-coded and utilized for varying ability levels. Write content on wheels when they are in position to make sure only one math problem shows at a time. This game becomes self-correcting by lining up problem with correct answer and using colors or symbols to indicate correct matching.

* * *

ACTIVITY: Slider Game

MATERIALS: Make holder and slider. Cut out windows and answer flap from holder. Cut two strips of oak tag and tape them to back of holder as shown. These will keep the slider in proper position. Place problems and answers on the slider when positioned in holder. This will assure proper spacing of numbers.


FRONT
BACK
6 2 4
WINDOWS
ANSWER FLAP
3 - 2 =
WHAT IS THE DIFFERENCE?
HOLDER:
8 2 6
SLIDER
STRIPS TAPED TO BACK OF HOLDER TO SECURE THE SLIDER.

To make the game multi-level, construct several sets of sliders with problems of varying difficulty.

PROCEDURE: Child reads the number sentence and answers orally. Then he opens the window and checks answer. Variation: Child writes number combinations.

* * *

Teacher Notes

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MOTOR DEVELOPMENT

Development of motor skills is an essential part of the total growth process in your children. Children must try out all of the possible movements of their bodies in order to discover exactly what their body and its parts can do. They first use large muscles and with maturation, gain control over small muscles. Muscle control begins at the head and moves to the feet, proceeds from the center of the body outward--all in an orderly fashion.

Young children should be exposed to a wide range of motor activities in order to foster motor development. "If a child is restricted in his opportunities to experiment with and integrate his motor skills, he will remain underdeveloped."*

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GROSS MOTOR DEVELOPMENT

Gross Motor skills involve the development and awareness of large muscle activity. It is concerned with body control, mobility, coordination, and balance. The activities are designed to develop more effective body movements, a sense of spatial orientation, and body awareness.

Classroom activities do not always provide enough gross motor experiences; the teacher must utilize outdoor experiences as well as indoor motor experiences.

The primary purpose of gross motor activities is to have fun while directly developing motor skills.

Skills:

-walks at different rates
-walks a line, then a balance beam (forward, backward, sideways)
-runs easily
-jumps with feet together
-jumps over small obstacles
-hops on one foot
-kicks a large ball
-throws a ball overhand, underhand
-bounces and catches a ball
-hits a target with ball or bean bag
-responds to rhythm
-touches and/or moves body parts on demand
-demonstrates motion concepts (turn, twist, crawl, roll, in, out, etc.)
-marches
-gallops
-stands on alternate feet
-jumps rope

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ACTIVITIES

Skill: Walking

Walking is defined as the transference of weight from one foot to another while moving in a forward or backward direction. The arms swing in a parallel fashion, the right arm swings with movement of left leg followed by left arm and right leg.

Activities:

Walk slowly about the space
Walk quickly about the space
Walk in circle, triangle, square, etc.
Walk backwards
Walk on heels
Walk on tiptoes
Walk lightly
Walk heavily
Walk sadly
Walk happily

ACTIVITY: Walking Forwards, Backwards, and Sideways

MATERIALS: Outside - blacktop and chalk/dirt, grass and powder chalk
Inside - open space and tape on floor

PROCEDURE: Draw a cross with arms at least six feet long. Mark a circle or square in the center to serve as home base. Child stands in the middle of the circle. Now child walks straight ahead; now walk backwards to the center of the circle. Continue until child walks sideways to the left and right and back to the center, as well as forwards and backwards, then back to the center.

a. Have child walk with eyes closed.
b. Put numbers on the walking game.
c. Pretend to be a traffic cop and give directions; use hand signals to show "stop and go" and directions; use a whistle to add fun.

* * *

ACTIVITY: Walking Creatively

MATERIALS: A collection of objects which will help a child to walk in different ways: high heels, big boots, cane, umbrella, funny hats, grocery bags filled with crumpled paper

PROCEDURE: Have the child choose an object from the box, and show how he can walk with it.

a. Combine more than one item.
b. Change items.

* * *

ACTIVITY: Walking with Good Balance

MATERIALS: Bean bag, paper cups 2/3 filled with sand, potatoes

PROCEDURE: Mark out a course at least eight feet long.

1. Place bean bag on child's head
2. Place potatoes on the back of the child's hands
3. Place cups of sand in each palm of each hand

* * *

ACTIVITY: Carrying Peanuts on a Spoon

MATERIALS: Tablespoon, bag of unshelled peanuts, coffee can

PROCEDURE: Set a course at least eight feet long. At one end, place the peanuts, and at the other end, place the coffee can. Put one peanut in the spoon. A child carries the peanut in the spoon and walks to the can, then runs back to get another peanut.

a. Make a relay race and divide the class into two teams
b. Use an egg timer and see how many peanuts each child can get in the can in a specified amount of time

* * *

Skill: Running

Movement with transfer of weight from one foot to another with momentary loss of contact with the floor by both feet.

Activities:

Run about space informally
Run with knees high
Run in zig zag pattern
Run backwards
Run on tiptoes
Run like animals

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ACTIVITY: Following a course

MATERIALS: Five objects to use as markers in a race course such as: trash cans, bowling pins, baskets

PROCEDURE: Set markers in an open area where a child can run. Make an easy course to start with. The child runs around each marker and returns to starting point by running around each marker again.

a. Child runs course with hands on hips, hands on head, or hands behind back.
b. Give child a small block, as child runs he places a block on each marker.

* * *

ACTIVITY: Duck, Duck Goose

MATERIALS: None

PROCEDURE: One child passes around the circle behind the others, touching each child lightly on the head, saying "Duck, Duck, Duck". One time he/she will say "Goose"; that child must try to catch the first child as they run around the circle. The first child runs around the circle one time trying to get in the second child's place. If he/she is caught, he/she must go in the middle of the circle until the next person is caught. If he/she is not caught, he/she sits down to show that he/she has had a turn. The second child then walks around the circle, saying, "Duck, Duck, Goose," and the game continues.

* * *

ACTIVITY: Run For Your Supper

MATERIALS: None

PROCEDURE: The children form a circle by joining hands. One child is chosen to be it, and he/she walks around the circle. He/she places his/her arms between two players and says, "Run for your supper". Those two players run around the circle in opposite directions. The first one returning to his/her vacant spot becomes "it". The first player joins the circle.

* * *

ACTIVITY: Hunter

MATERIALS: Tape X

PROCEDURE: One child is chosen for the wolf. Three are chosen for a rabbit, a chicken, and a turkey. They hide in various homes around the room. The wolf says, "I am looking for my dinner. I think I'll have a rabbit." The rabbit must run from his home to the X spot in the circle before he is caught by the wolf. Each animal is called in like manner.

* * *

ACTIVITY: Parachute or Large Sheet

MATERIALS: Old parachute or sheet

PROCEDURE:
1. Lift sheet together-peek underneath, then back down.
2. One child runs to the center of sheet when it is lifted and then runs back to place.
3. A child runs to the other side of the sheet when it is lifted - then back to his own place.
4. Child runs under sheet, freezes, and sheet is pulled down on top of child.
5. Merry-Go-Round - each child holds sheet in one hand and walks, skips, runs in a circle.

* * *

Skill: Jumping

Taking off on one foot and landing on both feet.

Activities:

Jump in place
Jump with feet together
Jump with feet apart
Jump in different directions
Run and jump
Jump to rhythm 4/4. 3/4 or 2/4

ACTIVITY: Jumping onto a Target

MATERIALS: Wooden box (low chair) to jump from, colored paper

PROCEDURE: Put colored pieces of paper on the floor around the box. Have the child jump to the color of paper that you name. Give the child a bean bag and have him/her throw it on a color and then jump to that color.

* * *

ACTIVITY: Jack Be Nimble

MATERIALS: Bowling pin

PROCEDURE: Place the bowling pin in the middle of the floor. The child jumps over the bowling pin as the class says:

Jack be nimble,
Jack be quick,
Jack jump over the candle stick.

* * *

ACTIVITY: Tire Jump

MATERIALS: Tires

PROCEDURE: Place the tires in a path; the child jumps in and out of the tires.

* * *

ACTIVITY: Ladder Jump

MATERIALS: Tape

PROCEDURE: Place tape on the floor to look like a ladder; the child jumps between the lines.

* * *

Skill: Hopping

Taking off on one foot and landing on same foot. Toes are last to leave floor and first to touch floor on downward movement.

Activities:

Hop in place
Hop forward
Hop backward
Hop sideward
Hop in place using rhythm 4/4, 3/4 or 2/4
Hop in place with 1/4 turns
Hop on one foot several times, then the other

ACTIVITY: Bunny - Bunny

MATERIALS: None

PROCEDURE: Children form a circle and then sit down. One child is selected as the bunny and begins the game by hopping to a child in the circle and asks, "Bunny, bunny, how's your neighbor?" The selected child says, "I don't know, but I'll go see." He/she then hops to another child in the circle and asks the same questions. The game continues until all the children have had a turn.

* * *

ACTIVITY: Color Hoops

MATERIALS: Large colored plastic hoops (red, blue, orange)

PROCEDURE: Place the hoops close together on the floor. Direct the child to hop inside the red hoop, the blue hoop, the orange hoop. Teacher continues by making up own directions.

1. Hop on carpet squares
2. Letters and/or numerals
3. Hop on one foot; then hop on the other foot

* * *

Skill: Skipping

A combination of a long step and a short hop in alternating fashion.

Activities:

Skip forward
Skip backward
Skip in a circle
Skip in place
Skip to rhythm
Skip with partner

ACTIVITY: Skipping Song

MATERIALS: None

PROCEDURE: Tune: Ten Little Indians. Start off with the first verse and walk around the room.

Lift one foot and then the other;
Lift one foot and then the other;

Lift one foot and then the other;
Ten little Indian boys and girls.

Hop on one foot then on the other;
Hop on one foot then on the other;
Hop on one foot then on the other;
Ten little Indian boys and girls.

Walk and hop and walk and hop now;
Walk and hop and walk and hop now;
Walk and hop and walk and hop now;
Ten little Indian boys and girls.

Skip and skip and skip, little Indians;
Skip and skip and skip, little Indians;
Skip and skip and skip, little Indians;
Skip little boys and girls.*

* * *

Skill: Throwing and Catching

ACTIVITY: Bean Bag Throw

MATERIALS: "Bull's Eye" target painted on poster board, balls

PROCEDURE: Attach "Bull's Eye" to wall or draw one on the chalkboard. Child throws large and small balls and tries to "hit" the target.

* * *

ACTIVITY: Scoop Ball

MATERIALS: Plastic detergent bottles, balls

PROCEDURE: Scoops, made of cut plastic detergent bottles, are used to throw and catch small balls. Children first catch the ball they throw themselves, then catch the ball from another child.

* * *

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ACTIVITY: **Sock Ball**

MATERIALS: Poster board, socks

PROCEDURE: Draw a large face on the poster board. Give a child three or four sock balls, and let him/her practice getting a ball on the eyes, nose, and mouth of the poster face.

* * *

FINE MOTOR DEVELOPMENT

Fine motor development involves the use of small muscles - hand and finger muscles and refinement in the use of these muscles. This development progresses from movements using the whole hand to precise movements using the finger tips. Children must also learn how to use their eyes and hands together in a coordinated manner.

Activities should be provided daily for developing fine motor skills. The materials and equipment utilized in skill development should be manipulative and incorporated into learning centers within the classroom and/or outside the classroom with adequate adult supervision:

Skills:

- build a tower
- turns knobs
- takes things apart and puts them back together
- places pegs in pegboard
- places forms in formboard
- works puzzles with increasing difficulty
- uses fingers and hands in fingerplays
- uses crayons with control
- uses paints and brushes with control
- rolls, pounds clay
- strings beads
- tears paper
- cuts straight and curved lines with scissors
- folds paper
- zips, buttons, snaps
- laces and ties
- draws a person with head, trunk, legs, arms, features
- traces and draws geometric figures
- writes letters and numerals
- writes name
- negotiates maze with finger and crayon*

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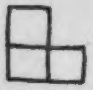
ACTIVITIES

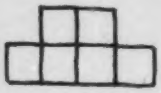
ACTIVITY: Building and Stacking

MATERIALS: Unit blocks, cube blocks, or other objects to be stacked

PROCEDURE: Build a tower with one hand. Build a tower with the other hand.

Make geometric shapes for the child to copy.





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ACTIVITY: Pegs

MATERIALS: Pegs, pegboard, pegboard designs

PROCEDURE: Begin by having child imitate action of putting peg in pegboard.

1. Place pegs in pegboard with one hand.
2. Use both hands simultaneously.
3. Remove pegs, alternating hands.
4. Child copies a design on his/her pegboard.
5. Child copies a model design from memory.

***

ACTIVITY: String Beads

MATERIALS: Beads, string, examples of bead patterns

PROCEDURE: Begin by stringing large beads, demonstrate to the child

1. Reduce size of the beads (one inch, one-half inch.)
2. Child copies a bead pattern using exactly same color, size, and shape of bead.
3. Child copies a bead pattern from memory.
4. String other materials - spools, macaroni, shells, paper shapes, etc.

***

ACTIVITY: Puzzles

MATERIALS: Variety of puzzles (large and small, simple and complex)

PROCEDURE: Begin with very simple puzzles containing five or six large pieces. Have the child look at the puzzle before taking the pieces apart - child should verbalize about what he/she sees (name object, colors, shapes).
Partner - Have two children work together to complete a puzzle. Then they exchange their puzzle with another set of partners.

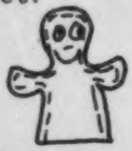
* * *

ACTIVITY: Lacing

MATERIALS: Sewing cards, laces

PROCEDURE: Demonstrate lacing in and out through each hole. Utilize geometric shapes, simple pictures; have child follow order of numerals or letters of the alphabet.

* * *



ACTIVITY: Stitching

MATERIALS: Six-inch burlap square, yarn, large darning needle

PROCEDURE: Demonstrate stitching - putting needle up and down, in and out of fabric.

1. Stitch designs on burlap.
2. Make a wall decoration by sewing squares together.
3. Use material shapes and make a puppet. Use magic markers to make face.

* * *

ACTIVITY: Sorting

MATERIALS: Colored popcorn, tweezers, muffin tin

PROCEDURE: Have children pick up popcorn with the tweezers (one kernel at a time) and put in muffin tin. Red in one section, blue in one section, etc. Variation: Utilize kitchen tongs and small objects (color cubes, small toys, etc.). Place objects on table and have child pick up object with tongs.

* * *

ACTIVITY: Tearing

MATERIALS: Paper

PROCEDURE:
1. Tear paper into randomly shaped pieces for future art projects.
2. Tear paper into geometric shapes.
3. Prepare perforated paper by running it through a sewing machine (unthreaded), tear on perforations.

* * *

ACTIVITY: Braiding

MATERIALS: Crepe paper

PROCEDURE: Tie three lengths of different colored paper to a chair. Take left strip and cross over center strip; cross right over center strip. Rope, heavy yarn, or twine may be used to make a belt or wall hanging.

* * *

ACTIVITY: Weaving

MATERIALS: One-inch paper strips, pre-cut paper frame

PROCEDURE: Weave over and under with one-inch strips of different colored paper.
Make frame by cutting horizontal rows of slits about 1½" long and 1" apart.

As students gain skill, they may choose to work with looms and loops. During the first experiences with looms, have students skip every other loom point so that weaving will not be as tight.

* * *

ACTIVITY: Pouring

MATERIALS: Water, rice, and cornmeal, various size containers, funnel

PROCEDURE: Have the children pour materials from one container to another. Mark each container and have children fill only up to the mark.

* * *

ACTIVITY: Clay

MATERIALS: Clay or home-made play-dough

PROCEDURE: Let children make animals, people, etc. Squeezing, rolling, punching, modeling

1. Roll clay into strips and copy numerals, letters, name card.
2. Roll clay into strips and cut with scissors.

* * *

ACTIVITY: Clothesline Fun

MATERIALS: rope, clothespins, objects to pin

PROCEDURE: Provide a clothesline with clip-type pins for the children to pin and unpin.

1. Put clothesline in playhouse and let children hang up clothes.
2. Put clothesline in math center and let children hand up numberals in sequence (language center--letters in sequence spell words or child's name).

* * *

ACTIVITY: Workbench/Tools

MATERIALS: nails, hammer, yarn, board

PROCEDURE: Woodworking Center--have children drive nails into a piece of board and let them wrap colored yarn around from nail to nail to form designs.

* * *

ACTIVITY: Bolt Board

MATERIALS: Wooden bolt board, various sizes nuts and bolts

PROCEDURE: Children screw bolts into the nuts already attached to the board (must discriminate between large and small bolts).

* * *

ACTIVITY: Manipulatives

MATERIALS: Loc Blocks, Lego, Mini-Konnecto, Fantasy Builder, Erector Sets, Flexy Blocks, Lincoln Logs, Tinkertoys, Slot-a-Rounds, Pop-n-Groove, etc.

PROCEDURE: Children are provided materials and daily alloted time periods for working and constructing with specified manipulatives.

* * *

ACTIVITY: Drawing and Writing

MATERIALS: Colored pencils, pencils, crayons, markers, paint, paper, stencils

PROCEDURE:
1. Hold crayon, etc., and scribble.
2. Hold crayon and produce forms of figures in creative art.
3. Trace circle, square, etc., using stencils.
4. Trace name.
5. Copy shapes from model.
6. Draw shapes and write name from memory.

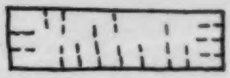
* * *

ACTIVITY: Cutting

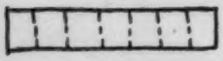
MATERIALS: Scissors, paper

PROCEDURE: Sequential steps for introduction of cutting (Larzarus & Carlin)

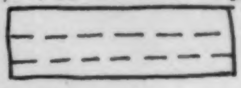
1. Random fringing



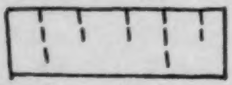
2. One-cut strip (only one snip needed to cut through)



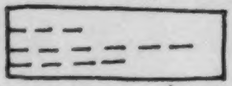
3. Straight line cutting (requires several strokes of scissors to cut through)



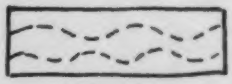
4. Half-snip (first step in developing control of line length)



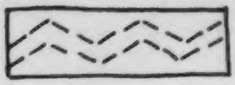
5. Alternating long & short lines (continued line control)



6. Cutting curves, (shallow, wide curves at first)



7. Zig-zag strips



8. Geometric forms: squares, circles, ovals, rectangles, triangles, and hexagons

For additional activities consult Guide:

Language Section -
Writing Skills

Art Section

* * *

ACTIVITY: Open and Closed Spaces

MATERIALS: None

PROCEDURE: Teacher asks the children to show an open or closed space with their arms and/or legs.

* * *

ACTIVITY: Make a Shape

MATERIALS: Shapes, letters, or numbers made from construction paper, oak tag

PROCEDURE:

1. Teacher holds up a shape, letter, or number and asks the children to make the shape with their body.
2. A group of children work together to form a geometric shape, letter, or number with their bodies.

* * *

ACTIVITY: Slinky

MATERIALS: Plastic or metal slinky

PROCEDURE: Children use their bodies to imitate the movements of the slinky as the teacher makes it stretch up tall, fold together, freeze, move quickly or slowly, bounce, twist, etc.

* * *

ACTIVITY: Shadowing

MATERIALS: Rhythm instrument or record

PROCEDURE: One child stands behind his partner and follows his/her partner in every movement. They will move around the room to a beat or to music.

FINE MOTOR ACTIVITIES

ACTIVITY: Bean Bags

MATERIALS: Home-made or commercially made bean bags. Record, Bean Bag Activities & Coordination Skills: Georgiana Stewart; Kimbo

PROCEDURE: Balance bean bags on different parts of body - walk, run, skip. Carry bean bags between knees. Pass bean bag as many different ways as possible - over shoulder, under arm, through the legs. Toss bean bag to an area and hop to it, skip, roll, etc.

* * *

ACTIVITY: Body Part Balancing

MATERIALS: None

PROCEDURE: Tell the children to balance on one, two, three, or four body parts. Each part must touch the floor. Hold each position for one, two, three, or four counts.

* * *

ACTIVITY: Music Movement

MATERIALS: Records: Pretend The Feel of Music, Movin: Hap Palmer; Educational Activities, Inc.

PROCEDURE: The songs on these records are designed for "pretending" with movement. The children are encouraged to move in their own way. Ideas are suggested for use of the various songs, but the teacher should adapt, change, add, and create to meet the needs and interests of the children.

* * *

CREATIVE MOVEMENT

Creative movement activities are designed to further children's motor development, increase awareness of the body and how it moves, and stimulate the imagination. The teacher encourages children to express themselves through movement by giving a verbal suggestion utilizing simple props and providing appropriate music.

Creative movement activities should be talked about and then done freely, to a rhythm beat, to music, individually, or in a group. The children should move with their own imagination and not model the teacher or other children. Activities should begin and end with a "special signal" - music, drum beat, verbal cue. It is important that each child be given a definite amount of space to allow freedom of movement.

ACTIVITIES

ACTIVITY: Mirroring/Echoing Body Movements

MATERIALS: Rhythm sticks, drum or gong

PROCEDURE:

1. Children change their heads to a different position when they hear the beat of the rhythm sticks. Repeat using other body parts: arms, shoulders, knees, feet, etc.
2. Teacher changes her/his head (other body part) on one beat, and children copy the same position.
3. Partners - one child acts as leader by changing positions of body parts each time he/she hears the beat. The partner copies each position immediately. Alternate leaders.
4. Echoing - teacher or leader changes body part on one beat and children copy the same position on the next beat.
5. "Riddle, riddle, riddle ree,
   Do a movement after me."
   Leader does a movement, then the group repeats the first movement as the leader begins a second movement.
6. Do what I say - the teacher tells the children to do one thing while she/he does something else.

* * *

ACTIVITY: Find a New Place

MATERIALS: None

PROCEDURE: "Find a new place to put your ___________." Insert isolated body parts - head, shoulders, back knees, etc. Repeat activity combining parts.

* * *

ACTIVITY: Body Part Balancing

MATERIALS: None

PROCEDURE: Children balance on one, two, three or four body parts. Each part must touch the floor. Hold each position for two or four counts.

* * *

Teacher Notes

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MUSIC

A learning environment for young children will include a variety of music experiences. Music can be spontaneous, planned, or it may be an outgrowth of another activity. Planned music experiences will include rhythms, games, listening, singing, moving to music, playing instruments, making instruments and creating music.

Music and song can facilitate and reinforce learning vocabulary, math skills, good manners, safety, and science as well as unit or seasonal activities. Familiar tunes may be used to accompany words which convey special meaning to a class. Children can be encouraged to create their own lyrics.

Musical experiences will become more complex through the year, with opportunity for repetition as well as new experiences. Creative movement to music helps develop confidence as the child learns to control and direct movement and express self.

Experiment with your class so that you and the children can become familiar with the voice range which is comfortable for singing. Some songs in books are pitched too high for the developing child's range. Simply lowering the starting tone one or two notes can often lead to more enjoyable singing.

A MUSIC CENTER may contain:

- -autoharp
- -tone bells
- -music box
- -music books and charts
- -piano
- -headsets for tapes or record player
- -xylophone
- -water glasses filled with varying amounts of liquid
- -various lengths of pipes with nail for striking

Children need not be denied enjoyable and varied musical experience even though the teacher is not a skilled musician. There are many excellent records which can provide children with music for all kinds of music experience. Many songs are sung to familiar tunes such as "Twinkle, Little Star" or "Mulberry Bush". Children enjoy singing, and they are not critical of a teacher who does not play the piano well or who does not have an exceptionally good voice.

Several publishing companies have music textbooks for early education which are on the state adopted textbook list. Some of the publishers include records for all of the songs in the books. These books include many activities to help provide a variety of musical experience for the classroom.

Sequence For Teaching a Song

- -Set the stage: Use a picture to discuss an experience, or ask a question to arouse interest. Be enthusiastic.
- -Play the song and invite the children to listen.
- -Sing the song for the children.
- -Say one or two lines at a time and have the children repeat the words.
- -Play the melody line and sing with the children.
- -Sing the song with piano accompaniment.

SONGS VERSES

To Make Learning Enjoyable

ACTIONS POEMS

O, DO YOU KNOW WHAT TIME IT IS
(Tune: O, Do You Know the Muffin Man)

O, do you know what time it is?
What time it is, what time it is?
O, do you know what time it is?
It's almost clean-up time.

WE HAVE HAD A HAPPY TIME
(Tune: Oats, Peas, Beans and Barley Grow)

We have had a happy time,
We have had a happy time,
In our work and in our play
We've had fun at school today.

STORY TIME

Sometimes my hands are at my side
Then behind my back, they hide,
Sometimes I wiggle my fingers so
Shake them fast
Shake them slow
Sometimes my hands go clap, clap, clap,
Now they are quiet as can be.

WE'RE GLAD TO SEE YOU
(Tune: Happy Birthday to You)

We're glad to see you,
We're glad to see you,
We're glad for our friends,
We're glad to see you.

GOOD HELPERS WE WILL BE
(Tune: Farmer in the Dell)

We're cleaning up our room,
We're cleaning up our room,
We're putting all our work away,
We're cleaning up our room.

Good helpers we will be,
Good helpers we will be,
There's work for all, there's work for all,
Good helpers we will be.

I WIGGLE MY FINGERS
(Tune: Farmer in the Dell)

I wiggle my fingers like this,
I wiggle my fingers like this,
Hello, hello how do you do, I wiggle
my fingers like this.

Directions - with Hello, hello shake fingers and sway body with rhythm of music.

I wiggle my head like this.
(hand, foot, etc.)

RIGHT HAND, LEFT HAND

This is my right hand,
(follow action as indicated)
I'll raise it up high.
This is my left hand,
I'll touch the sky.
Right hand, left hand,
Roll them around.
Left hand, right hand,
Pound, pound, pound.
(pound fist in other palm)

I WIGGLE

I wiggle my fingers
I wiggle my toes
I wiggle my shoulders
I wiggle my nose.

Now no more wiggles
Are left in me
So I will be still
As still as can be.

IF YOU'RE HAPPY AND YOU KNOW IT

If you're happy and you know it
Clap your hands
If you're happy and you know it
Clap your hands
If you're happy and you know it
Then your face is going to show it
If you're happy and you know it
Clap your hands.

Variations:

1. Stamp your feet
2. Shake your head
3. Blink your eyes
4. Let children invent actions
5. If you're sad and you know it
6. Angry - shake a fist
7. Hungry - rub your tummy
8. Sleepy - give a yawn
9. Scared - hide your face
10. Surprised - throw up your hands

Other verses: touch your nose
show a smile
tap your knees
stamp your feet
sing loud
sign soft
turn around

I have 10 little fingers and they all belong to me.
I can make them do things, would you like to see?
I can shut them up tight, or open them wide-
I can hold them in front or make them all hide-
I can hold them up high, I can put them down low,
I can hide them in back, then hold them just so
1-2-3-4-5-6-7-8-9-10.

HANDS

My hands upon my head I place,
Upon my shoulders, upon my face,
At my waist and by my side
And then behind me they will hide.
Then I raise them way up high,
And let my fingers swiftly fly.
Then clap, one, two, three,
And see how quiet they can be.

Sometimes my hands are at my side.
Then behind my back they hide.
Sometimes I wiggle fingers so,
Shake them fast, shake them slow.
Sometimes my hands go clap, clap, clap:
Then I rest them in my lap.
Now they're quiet as can be,
Because it's story time, you see.

SOMETIMES

Sometimes I am tall.
Sometimes I am small,
Sometimes I am very, very tall,
Sometimes I am very, very small,
Sometimes small, sometimes tall.
See how I am now.

CAN YOU?

Can you roll your eyes?
Can you wrinkle your nose?
Can you make your hand go the way mine goes?
Can you raise your eyebrow?
Can you make a big grin?
Can you snap your fingers?
Can you move your chin?
Can you close your eyes so you can hardly see?

Can you blink your eyes?
Can you sniff your nose?
Can you make your head go the way mine goes?
Can you tap your shoulders?
Can you pull your cheeks in?
Can you pull your ears?
Can you wiggle your chin?
Can you be just as quiet as quiet as can be?

HAND JIVE

Slap, slap (Slap hands on thighs.)
Clap, clap (Clap hands together.)
Pound this hand (Pound right fist in palm of left hand twice.)
Then the other (Pound left fist in palm of right hand twice.)
This elbow, (Pound right elbow in left palm twice.)
That elbow (Pound left elbow in right palm twice.)
Hands - reverse. (Wave right hand over left hand twice with
palms down, then reverse.)

THINGS TO DO

Hop one, step two, jump three, and four
Turn around, touch the ground,
Hop once more.

Jump one, hop two, step two and two.
Tap your toes, pat your nose,
Shine your shoe.

Step one, jump one, hop one and one,
Reach up - high, wave good-bye,
Now you are done.

I step, step, step, and clap, clap, clap.
And then I turn around.
I step, step, step and clap, clap, clap
And then I touch the ground.

I clap down low, I clap up high
I touch the ground. I touch the sky.

I step, step, step and clap, clap, clap
And then I sit right down.

BOA CONSTRICTOR

I'm being eaten by a Boa Constrictor
I'm being eaten by a Boa Constrictor
I'm being eaten by a Boa Constrictor
And I don't like it
Very much!
Oh no - he's got my toe!
Oh gee - he's up to my knee!
Oh my - he's up to my thigh!
Oh fiddle - he's up to my middle!
Oh heck - he's up to my neck,
Oh dread - he's up to my ...
SWRP!

RELAXATION

Close your eyes, head drops down
Face is smooth, not a frown,
Roll to left; head is a ball;
Roll to right, now sit tall;
Lift your chin, look at me;
Deep, deep breath, one, two, three.
Big, big smile; hands in lap.
Make believe you've had a nap.
Now you're rested from your play;
Time to work again today.

A BIRTHDAY VERSE:

Today, today, the big clock ticks,
Kathleen is six, Kathleen is six!

It seems but no time, sakes alive
Since she was five, since she was five.

And only minutes, nothing more,
Since she was four, since she was four.

Tick, tock, how fast the hours have run,
Since she was one, since she was one.

Such funny things she used to do
When she was two, since she was two.

Tick, tock, how fast the hours have run,
Since she was one, since she was one.

And how she's half of twelve! So quick
The birthdays fly: Tock, tick, tock, tick.

Kathleen is six, Kathleen is six,
Hurray! Hurray! the big clock ticks.

THE TEAPOT

I'm a little teapot, short and stout
This is my handle. (Put out hand on hip.)
This is my spout. (Extend opposite arm sideways,
hand out.)
When I get all steamed up, then I shout.
"Just tip me over and pour me out."
(Bend body opposite direction.)

Second Verse:

I'm a very clever pot, it is true
Here's an example of what I can do
I can change my handle and my spout
Just tip me over and pour me out.

MY HAT

My hat - it has three corners
Three corners has my hat
And had it not three corners
It would not be my hat.
(Motions are: touch yourself for my;
touch your head for hat;
hold up three fingers for three;
touch elbow for corners.)

A FUNNY CLOWN

Sometimes I like to be a clown,
A funny, funny clown.
I shake my hands
And shake my feet,
Then tumble, tumble down.

I stretch my arms out far and wide
And whirl them 'round and 'round.
Then once more shake
My hands and feet
And tumble to the ground.

GRANDMOTHER'S SPECTACLES

Here are grandmother's spectacles
(Make circles around eyes with thumb and
forefinger.)
Here is grandmother's cap
(Make hands come together in peak on
top of head.)
And this is the way she folds her hands
(Fold the hands.)
And lays them in her lap.
(Lay hands in lap.)

DOUGHNUT

Here is a doughnut
(Make circle with fingers and thumb)
Round and fat.
There's a hole in the middle,
(Make small circle.)
But you can't eat that.

IN THE FALL
(Tune" She'll Be Coming Round the Mountain)

1. When the leaves are red and yellow in the fall,
When the leaves are red and yellow in the fall,
When the leaves are red and yellow
Then the apples taste so mellow
When the leaves are red and yellow in the fall.

2. Though the bees are still a-hummin' in the fall.
Though the bees are still a-hummin' in the fall,
Though the bees are still a-hummin'
We know old Jack Frost is comin'
Though the bees are still a-hummin' in the fall.

3. Noisy crows are flapping there in the sky,
Noisy crows are flapping there in the sky,
Noisy crows are flapping there
Mr. Scarecrow says, "Be-ware,"
Noisy crows are flapping there in the sky.

4. Orange pumpkins lie a-gleaming in the sun,
Orange pumpkins lie a-gleaming in the sun,
Orange pumpkins lie a-gleaming,
There'll be jack-o-lanterns beaming
Orange pumpkins lie a-gleaming in the sun.

5. Oh, the air is crisp and colder in the fall,
Oh, the air is crisp and colder in the fall,
Oh, the air is crisp and colder
And the wind gets stronger, bolder
Oh, the air is crisp and cooler in the fall.

SIGNAL LIGHT

Red light, red light, what do you say?
I say, "Stop, and stop right away."
(Hold palm of hand up)
Yellow light, yellow light, what do you say?
I say, "Wait till the light turns green."
Green light, green light, what do you say?
I say, "Go, but look each way."
Thank you, thank you, red, yellow, green.
Now I know what the traffic lights mean.

JACK-IN-THE-BOX

Jack-in-the-box, all shut up tight,
Not a breath of air, not a peep of light
How tired he must be, all in a hump,
Open the lid and out he'll jump.

PUMPKIN FAT

Pumpkin, pumpkin, round and fat
Turn into a Jack-O-Lantern
Just like that!
(brush hands together or snap fingers)

WIDE-EYED OWL

There's a wide-eyed owl
(circles with fingers)
With a pointed nose,
(forefingers down nose)
With two pointed ears,
(forefingers up on head)
And claws on his toes.
(Extend forearms with fingers held like
claw.)
He lives high in a tree
(pointing overhead)
When he looks at you
(point to a child)
He flaps his wings (elbows like wings)
And says, "Whoo, whoo, whoo,"
(hands like megaphone)

MUSIC/SONGS-VERSES

COME SING A SONG OF SEASONS
(Tune: Did you ever see a Lassie?)

Come, sing a song of winter, of winter, of winter,
Come, sing a song of winter, the cold days are here.
With blowing and snowing and rosy cheeks glowing,
Come sing a song of winter, the cold days are here.

Come, sing a song of autumn, of autumn, of autumn,
Come, sing a song of autumn, for summer has gone,
The leaves are turning all red, yellow, and brown,
Come sing a song of autumn, for summer has gone.

Come, sing a song of springtime, of springtime, of springtime,
Come, sing a song of springtime, the warm days are here.
With gay robins singing and bright flowers blooming,
Come sing a song of springtime, the warm days are here.

THE PUMPKIN SONG (Tune: Mary Had a Little Lamb)

We are pumpkins big and round, big and round, big and round;
We are pumpkins big and round, sitting on the ground.

See our great big shiny eyes, shiny eyes, shiny eyes;
See our great big shiny eyes, looking all around.

See our great big laughing mouths, laughing mouths, laughing mouths;
See our great big laughing mouths, smiling right at you!

I HAD A PUMPKIN (Tune: Did you ever see a Lassie?)

Oh, I had a pumpkin, a pumpkin, a pumpkin
Oh, I had a pumpkin, with no face at all.
With no eyes and no nose and no mouth and no teeth.
Oh, I had a pumpkin with no face at all.

So I made a jack-o-lantern, jack-o-lantern, jack-o-lantern,
So I made a jack-o-lantern, with a big funny face.
With big eyes and big nose and big mouth and big teeth
So I made a jack-o-lantern with a big funny face.

ONE LITTLE, TWO LITTLE, THREE LITTLE WITCHES
(Tune: Ten Little Indians)

One little, two little, three little witches,
Fly over haystacks, fly over ditches,
Slide down the moon without any hitches,
Hi! Ho! Halloween's here!

Stand on your head with a lop-sided wiggle,
Tickle your black cats till they giggle,
Swish through the air with a higgle-piggle,
Hi! Ho! Halloween's here!

Horned owl's hooting, it's time to go riding,
Deep in the shadows, black cats hiding,
Gay little goblins sliding, gliding,
Hi! Ho! Halloween's here!

THREE LITTLE WITCHES
(Tune: Three Blind Mice)

Three little witches!
Three little witches!
See, how they fly!
See, how they fly!
They jumped on their brooms and
  they flew to the moon.
They lost their balance and fell to
  their doom.
Poor little witches!
Poor little witches!

GOBLIN IN THE DARK
(Tune: Farmer in the Dell)

The goblin in the dark,
The goblin in the dark,
Hi Ho it's Halloween
The goblin in the dark.
The goblin takes a witch.
The witch takes a cat.
The cat takes a bat.
The bat takes a ghost.
The goblin runs away.
The cat runs away.
The bat flies away.
The ghost says BOO!

FLYING WITCH

The strangest sight I've ever seen is:
  A fat old witch on a flying machine.
The witch flew high
The witch flew low
The witch flew fast
The witch flew slow
The witch flew up
The witch flew down
She flew afound and around the town.
She flew to the left
She flew to the right
She quickly flew - right out of sight!
  A fat old witch on a flying machine.
And do you know what?
I saw it all on Halloween.

POP MY CORN
(Tuhe: Row, Row, Row, Your Boat)

Pop, pop, pop my corn,
Pop it big and white.
Popping, popping, popping, popping,
'Til it is just right.

FIVE LITTLE GHOSTS

Five little ghosts dressed all in white
Were scaring each other on Halloween night.
"Boo!" said the first one, "I'll catch you!"
"Whoo!" said the second, "I don't care if you do!"
The third ghost said, "You can't run away from me."
And the fourth one said, "I'll scare everyone I see."
Then the last one said, "It's time to disappear,
See you at Halloween time next year."

TRICK OR TREATING (Tune: Frere Jacques)

Trick or treating,
Trick or treating,
Halloween, Halloween
All the spooks are prowling,
All the spooks are prowling,
Boo, boo, boo! Boo, boo, boo!

Jack-O-Lantern, Jack-O-Lantern,
Halloween, Halloween,
See the witches flying,
Hear the winds sighing,
Woo-oo-oo
Woo-oo-oo

INDIAN

I am a little Indian
(fingers behind head for feathers)
I lived long, long ago.
I lived inside a teepee.
(Point two fingers together.)
And I handle an arrow and bow.
(Pretend to shoot)

FIVE INDIANS

Five little Indians
Standing in a row
Four stood straight and tall
While one stood just so,
Along came the Chief
And what do you think?
Up jumped that Indian
Quick as a wink!

THERE WAS AN OLD WOMAN
(D minor G minor)

There was an old woman all skin and bones
Ooooooo Ooooooo Ooooooo
She lived down by the old churchyard
Ooooooo Ooooooo Ooooooo
One night she thought she'd take a walk
Ooooooo Ooooooo Ooooooo
She walked down by the old graveyard
Ooooooo Ooooooo Ooooooo
She saw the bones a-laying around
Ooooooo Ooooooo Ooooooo
She thought she'd sweep the old church house
Ooooooo Ooooooo Ooooooo
She went to the closet to get her broom
Ooooooo Ooooooo Ooooooo
She opened the door and . . . . . BOO!

TEN LITTLE INDIANS

One, little, two little, three little Indians,
Four little, five little, six little Indians,
Seven little, eight little, nine little Indians,
Ten little Indian boys.

Each one rode a spotted pony,
Each one rode a spotted pony.
Each one rode a spotted pony,
Ten little Indian boys.
(Gallop around circle, slapping thighs.)

Each one shot a big, fat turkey.
(Kneel on one knee in bow and arrow position)

Each one did an Indian Rain Dance.
(Walk around circle, stepping on toe and then heel)

Each one paddled a little canoe.
(Sit and pretend to paddle a canoe, then fall back into water)

INDIAN CHILDREN

Where we walk to school each day
Indian children used to play
All about our native land
Where the shops and houses stand.
And the trees were very tall
And there were no streets at all.
Not a church and not a steeple
Only woods and Indian people.
Only wigwams on the ground
And night, bears prowled around
What a different place today
Where we live and work and play.

INDIANS

Ten little Indians in a teepee.
(hold up ten fingers)
Ten little Indians quiet as can be.
(bend down fingers)
Ten little Indians give a big shout.
(hoo)
Ten little Indians run all about.
(clap)
Ten little Indians paddle a canoe.
(imitate paddling)
There just isn't anything an Indian can't do.
(hands extended)

FIVE TURKEYS

Five little turkeys sitting by the barn door
One ran away, and then there were four.
Run turkey, run turkey, run far away,
Soon it will be Thanksgiving Day!

Four little turkeys sitting under a tree,
One ran away and then there were three.
Run turkey, run turkey, run far away,
Soon it will be Thanksgiving Day!

Three little turkeys playing Skip to My Lou
One ran away and then there were two.
Run turkey, run turkey, run far away,
Soon it will be Thanksgiving Day!

Two little turkeys lying in the sun,
One ran away and then there was one.
Run turkey, run turkey, run far away,
Soon it will be Thanksgiving Day!

One little turkey having no more fun,
He ran away and then there were none.
Run turkey, run turkey, run far away,
Soon it will be Thanksgiving Day!

FIVE LITTLE JINGLE BELLS

Five little jingle bells ringing merrily,
In the toy shop window, for everyone to see.
Along came (child's name) a penny to pay,
Chose a (color) bell and went away.
(Continue through all the numbers and use
bells of differing colors made from
construction paper or oak tag colored.)

THANKSGIVING SONG

(Tune: Are You Sleeping, Brother John?)

Thanksgiving, Thanksgiving
Here it comes,.
Here it comes,
Turkey on the table
Turkey on the table
Um-Um good.
Um-Um good.

"CHRISTMAS PUZZLE"

I can make a tinkle
Or a loud ring, as well.
I might be big or very small
For I'm Christmas

I'm up in the sky at night.
You can see me from afar.
Now and then I twinkle.
I am a shining __________!

At Christmas time I'm dressed up
As pretty as can be.
I'm green and I smell piney.
I am a ________________!

HERE IS SANTA

Here is Santa. (one thumb)
Here is his sleigh (other thumb)
These are the reindeer (eight fingers)
Which he drives away.
Dasher, Dancer, Prancer, Vixen,
Comet, Cupid, Donder and Blitzen.
Away they all go.

SANTA'S REINDEER

1, 2, 3, 4, 5, little reindeer
(Pop fingers up one by one.)
Stand beside the gate:
"Hurry, Santa," said the five,
"So we will not be late!"
(Make fist.)
1, 2, 3, 4, 5, little reindeer;
(Pop fingers up one by one.)
Santa said, "Please wait!
Wait for three more little reindeer
And then that will make eight."
(Hold up three more fingers.)

THE SNOWMAN

Let's roll a tiny snowball (Make ball.)
Til it gets big and round. (Circle arms.)
Let's roll it through the snowdrifts
(Pretend to push)
It doesn't make a sound (Whisper.)
Give the snowman head and eyes (Point)
A broom for him to hold (Pretend to hold.)
A mouth, a nose, and a scarf (Point.)
So snowman won't get cold. (Shiver.)

A SINGING GAME
"Here We Go Round the Christmas Tree"
(Tune: Mulberry bush)

1. Here we go round the Christmas Tree
The Christmas Tree, the Christmas Tree
Here we go round the Christmas Tree
So early Christmas morning.

2. What do you want dear Santa to bring
Dear Santa to bring, dear Santa to bring
What do you want dear Santa to bring
So early Christmas morning.

3. I want a pretty doll to rock
Doll to rock, doll to rock
I want a pretty doll to rock
So early Christmas morning.

1. Children dance around in circle, one in middle.
2. Stop and shake finger at girl in center as they sing.
3. She makes motion and all join in second line.

A new girl/boy is chosen to go in center ring-she/he makes up a new verse three as "soldier to march" or "big ball to bounce," etc.

I'M A LITTLE SNOWMAN (Tune: I'm a Little Teapot)

I'm a little snowman, short and fat.
Here is my broomstick, here is my hat.
When the sun comes out I melt away...
Down, down, down, down, whoops....I'm a puddle
(add appropriate motions)

A-HUNTING WE WILL GO (Tune: Farmer in the Dell)
You can make a rhyming game

A hunting we will go,
A hunting we will go.
We'll catch a cat and put him in a hat,
A hunting we will go.

We'll catch a duck and put him in a truck.
We'll catch a mouse and put him in a house.
We'll catch a bear and put him in a chair.
We'll catch a whale and put him in a pail.
We'll catch a goat and put him in a boat.
We'll catch a snake and put him in a cake, etc.

LITTLE ARABELLA MILLER (Tune: Twinkle Twinkle)

Little Arabella Miller found a wooly caterpillar
First it crawled upon her mother,
Then upon her baby brother;
All said, "Arabella Miller, take away that caterpillar."

JINGLE BELL POLKA

Dashing thru the snow in a one horse open sleigh
Over the fields we go - laughing all the way,
Bells on bob-tails ring - making spirits bright,
Oh what fun to ride and sing a sleighing song tonight.

**CHORUS -
Jingle bells, jingle bells, jingle all the way,
Oh what fun it is to ride in a one horse open sleigh - hey

Jingle bells, jingle bells, jingle all the way,
Oh what fun it is to ride in a one horse open sleigh.
Hold hands and make a circle
--take four steps in and four steps out
--(repeat above)
--circle to the right--
--circle to the left--

**Break into groups of 4-6 with right arms up touching fingers--on "oh" switch to left hands up,
On "hey" clap and switch to right. Then repeat.

HICKORY, DICKORY DOCK

Hickory, Dickory Dock
The mouse ran up the clock
The clock struck one,
The mouse ran down
Hickory, Dickory Dock.

The clock struck two, the mouse said "Boo."

The clock struck three, the mouse said "Whee."

The clock struck four, the mouse said "No more!"

ROLL THAT RED BALL
(Tune: Mary Had a Little Lamb)

Roll that red ball down to town
Roll that red ball down to town
Roll that red ball down to town
Early in the morning
(Children may choose other actions such as kick that red ball, throw, bounce, etc.)

HOUSES

This is a nest for the bluebird.
(Cup hands, palms up.)
This is a hive for the bee.
(Fists together palm to palm)
This is a hole for the bunny rabbit.
(Fingers make a hole.)
And this is a house for me.
(Fingertips together to make a peak.)

THE BUS

The wheels on the bus go round and round,
round and round, round and round
The wheels on the bus go round and round
All through the town.

The driver on the bus blows his horn
beep-beep-beep, beep-beep-beep
The driver of the bus blows his horn
All through the town.

The driver on the bus says, "Move on back"
"move on back, move on back"
The driver on the bus says, "Move on back"
All through the town.

The people on the bus go bump, bump, bump,
bump, bump, bump, bump, bump, bump,
The people on the bus go bump, bump, bump,
All through the town.

DO YOUR EARS HANG LOW?

(Tune: Turkey in the Straw)

Do your ears hang low? Do they wobble to
and fro?
Can you tie them in a knot? Can you tie
them in a bow?
Can you throw them over your shoulder like
a Continental soldier?

First time sing complete song
Second time do not sing last work "low"
(Pantomime it)
Continue singing song omitting "soldier,"
"shoulder," "bow," "knot," "fro," "low"
(Pantomiming each)

FALLING

Falling, falling, slowly falling,
Almost to the ground,
Quickly raise them,
All the fingers twirling round and round.

Falling, falling, falling, falling, falling
to the ground
Quickly pick them up again and turn them
round and round
Faster, faster, faster, faster;
Slower, slower, slow
Faster, faster, faster, faster
Slower, slower, stop.

BINGO

There was a farmer who had a dog and Bingo was his name-o B-I-N-G-O; B-I-N-G-O; B-I-N-G-O: and Bingo was his name-o. Repeat five times, substituting clap for additional letter time. (Last time will be five claps, in rhythm)

OPEN THEM, SHUT THEM

Open them, shut them.
Open them, shut them.
Give a little clap.
Open them, shut them.
Lay them in your lap.
Creep them, creep them
Slowly upward to a rosy cheek.
Open wide those shiny eyes
And through the fingers peek.

EENCY, WEENCY SPIDER

EENCY WEENCY Spider
EENCY WEENCY Spider went up the water spout
Down came the rain
And washed the spider out.
Out came the sun
And dried up all the rain,
So the spider went up the spout again.

TO HELP REMEMBER DAYS OF THE WEEK AND MONTHS OF THE YEAR

Thirty Days hath September,
April, June, and November;
All the rest have thirty-one,
Save February, which has twenty-eight in kind.
And leap year brings it twenty nine.

How Many Days?
Solo: How many days do I have to play?
Unison: Sunday, Monday, Tuesday, Wednesday,
Thursday, Friday, Saturday.
Solo: How many nights do I have to sleep?
Unison: Sunday, Monday, Tuesday, Wesnesday,
Thursday, Friday, Saturday.

THE YODELER SONG

Oh, a yodeler went yodeling on a mountain top high,
When along came an avalanche, and interrupted his cry.

Chorus:
O-le-o
O-le-wa-ka-ke-o
O-le-wa-cuckoo (swish)
O-le-wa-ka-ke-o-o
Oh, a yodeler went yodeling on a mountain top high,
When along came a grizzly bear, and interrupted his cry.
Chorus: Add grr after swish
Oh, a yodeler went yodeling on a mountain.top high.
When along came a St. Bernard, and interrupted his cry.
Chorus: Add pant, pant, pant
Oh, a yodeler went yodeling on a mountain top high,
When along came a pretty girl, and interrupted his cry.
Chorus: Add kiss, kiss, kiss

SEASONS

Spring is showery, flowery, bowery,
Summer: hoppy, croppy, poppy;
Autumn: wheezy, sneezy, freezy;

THE RAINDROPS

When the flowers are thirsty and the leaves
  are dry. (hands up)
Merry little raindrops tumble from the sky.
(Bring the hands down, wiggling fingers.)
All about they patter, in their happy play,
(side to side motion-fingers wiggle)
Till the bright warm sunshine makes them
  quickly run away.
(Hide hands behind back.)

I AM A SEED

I am a seed in the earth below
(crouch to floor)
Down comes the rain and makes me grow.
(rise slowly)

THERE IS THUNDER (Tune: Frere Jacques)

There is thunder
There is thunder
Hear it roar
Hear it roar
Pitter, patter rain drops
Pitter, patter rain drops
I'm all wet!
I'm all wet!

MICHAEL FINNEGAN

There was an old man
Named Michael Finnegan,
He had whiskers on his chinnegan
The wind came along and blew
  them in again
Poor old Michael Finnegan - (Begin Again.)
There was an old man
Named Michael Finnegan
He went fishing with a pinnegan
He caught a fish and threw it in again
Poor old Michael Finnegan - (Begin Again.)
There was an old man
Named Michael Finnegan,
He grew fat and then grew thin again
And he dies and had to begin again
Poor old Michael Finnegan - (Begin again.)

TWO LITTLE APPLES

Way up high in the apple tree (Point up.)
Two little apples smiling at me
(Hold both fists in the air.)
I shook that tree as hard as I could
(Shake hands.)
Down came the apples
(Move fists down to knees.)
Mmmm Mmmm they were good!

LITTLE PETER RABBIT
(Tune: Battle Hymn of Republic)

Little Peter Rabbit had a fly upon his nose.
Little Peter Rabbit had a fly upon his nose.
Little Peter Rabbit had a fly upon his nose.
And he flipped it, and he flopped it, and it
  flew away.
Motions:
Peter Rabbit make tall ears
Flap hand like fly
Flip hands one way - flop other way
Flew away - hands fly over shoulders
(Repeat four times; each time use action
  only without words, adding one omission
  each time.

I KNOW A LITTLE PUSSY

I know a little pussy,
Her coat is silver gray;
She lives down in the meadow,
Not very far away.
Although she is a pussy;
She'll never be a cat,
For she's a pussy willow--
Now what do you think of that?
Meow, meow, meow, meow, SCAT!
(children start from a crouch position, rise
slowly, then come down again on the "meows"
and jump up again on SCAT)

EASTER RABBIT (Tune: Mulberry Bush)

A little rabbit came to town
  came to town, came to town
A little rabbit came to town, Hop, Hop, Hop

He carried a basket in his hand,
  in his hand, in his hand.
He carried a basket in his hand, Hop, Hop, Hop.

We followed him around the town,
  'round the town, 'round the town.
We followed him around the town, Hop, Hop, Hop.

The little rabbit hid his eggs, hid his eggs,
  hid his eggs.
The little rabbit hid his eggs, Hop, Hop, Hop.

On Easter Day we found the eggs.
  found the eggs, found the eggs.
On Easter Day we found the eggs, Hop, Hop, Hop.

We thank you for the Easter eggs,
  Easter eggs, Easter eggs.
We thank you for the Easter eggs, Hop, Hop, Hop.

CAUGHT A FISH

One, two, three, four, five,
I caught a fish alive.
Six, seven, eight, nine, ten,
I let him go again.
Why did I let him go?
Because he hurt my finger so.
Which finger did he bite?
The one on the right

TEN LITTLE FROGS

Ten little speckled frogs,
Sat on a speckled log,
Catching some most delicious bugs Yum, Yum
One jumped into the pool,
Where it was nice and cool
And there were nine green speckled frogs,
Glub, Glub
(Repeat until there are no speckled frogs)

FIVE IN THE BED

There were five in the bed
And the little one said,
"Roll over, roll over."
So they all rolled over
And one fell out
There were four in the bed . . .
(Continue on through number one
  at which point the little one said,
"Goodnight!")

HERE'S A BUNNY

Here's a little bunny.
(Hold up two fingers.)
Who hops so funny
(Two fingers in hopping motion)
Here's his hole in the ground.
(Make circle of thumb and first
  finger of opposite hand.)
When he hears a little noise
He pricks up his ears
And hops in the hole in the ground.
(Two fingers disappear in circle.)

FIVE LITTLE ALLIGATORS

Five little alligators peeping at the door;
One crawled away, and then there were four;
Alligator, alligator, happy and gay,
Alligator, alligator, crawl away

Four-----happy as can be
Three----living in the zoo
Two------lying in the sun
One------not having any fun;
---------and then there were none.

MY DOG RAGS

I have a dog and his name is Rags
He eats so much that his tummy drags
His ears flip, flop,
His tail wig wags
And when he walks he goes zig zag
Flip-flop--Wig-wag--Zig-zag
Flip-flop--Wig-wag--Zig-zag

FIVE LITTLE MICE

Five little mice went out to play
Gathering crumbs along the way
Out comes pussycat
Silky and fat.
MEOW!
Four little mice went scampering back.

WHAT THE ANIMALS DO

We'll hop, hop, hop like a bunny
And run, run, run, like a dog.
We'll walk, walk, walk like an elephant,
And jump, jump, jump like a frog.
We'll swim, swim, swim like a goldfish,
And fly, fly, fly like a bird.
We'll sit right down and fold our hands
And say not a single word.
(Words suggestive of action.)

THIS OLD MAN

This old man, he played one,
He played knick-knack on my thumb
With a knick-knack, paddy wack
Give a dog a bone
This old man came rolling home.
Repeat
Two - on my shoe
Three - on my knee
Four - on my door
Five - on a hive
Six - on my sticks
Seven - up to heaven
Eight - on the gate
Nine - on my spine
Ten - over again.

THE THREE BEARS (Clap in Rhythm)

Once upon a time in a nursery rhyme there lived the three bears (grunt); the three bears (grunt). They all went a-walking in the deep woods a-talking and along came a little girl with long flowing golden hair, and her name was Goldilocks. And upon the door she knocked but no one was there, no one was there. She walked right in and had herself a ball; she didn't care, cause no one was there. Home came those three bears. Someone's been eating my porridge said the pappa bear, said the papa bear (in loud voice.) Someone's been eating my porridge said the mama bear, said the mama bear, (in mama bear's voice.) Hey mama bear, said the little wee bear, someone has broken my chair (Scream.) Goldilocks woke up and broke up the party and best it out of there. Bye, bye, bye said the papa bear. Bye, bye, bye, said the mama bear. Hey mama bear, said the little wee bear and that's the story of the three bears, the three bears.

EAST AND WEST

This is East and this is West.	(Pointing each direction)
Soon I'll learn to say the rest.	
This is high and this is low.	(Hold hand high, then low)
Do you see how much I know?	
This is narrow, this is wide.	(Hold hands a little apart, then wide)
Something else I know beside,	
Down is where my feet you see.	(Pointing to feet)
Up is where my head should be.	(Point)
This is my right hand you see,	(Hold out right hand)
This is my left hand, we all agree.	(Hold out left hand)
Over head I hold them high	
Clap, clap, clap and then let them lie.	

BEAR HUNT (For rhythms and fundamental sounds)

Teacher: Let's go on a bear hunt.
Children: Repeat (Imitate walking by slapping knees alternately.)
Teacher: I see a wheatfield, can't go over it, can't go under it. Let's go through it (arms straight ahead like a fish swimming)

I see a bridge, can't go around it, can't go under it. Let's go over it. (Hands slap up from stomach, chest then down again)

I see a lake, can't go over it, can't go under it, let's swim. (Arms "swimming")

I see a tree, can't go over it, can't go under it, let's go up it. (Climb and look. Say, "I don't see any bears. "Say, "Let's go down.")

I see a swamp, can't go over it, can't go under it, let's go through it. (Pull hands up and down slowly)

I see a cave, can't go over it, can't go under it, let's go in. (Slower)

I see two eyes, I see two ears, I see a nose, I see a mouth. IT'S A BEAR!
(Do all in reverse very fast)

FOUR BLUE PIGEONS
(Tune: Three Blind Mice)

Four Blue Pigeons
Four Blue Pigeons
Four Blue Pigeons
Sitting on a fence.
Oh, Look!
One has flown a-way
What a shame.

Repeat
Three Blue Pigeons, etc.
Two Blue Pigeons, etc.
One Blue Pigeon, etc.

No Blue Pigeons
No Blue Pigeons
No Blue Pigeons
Sitting on a fence
Oh, Look!
One has re-turned
Let us re-joice

One Blue Pigeon
One Blue Pigeon
Sitting on a fence
Oh, Look!
One has re-turned
Let us re-joice
Repeat - Two, three, four
Blue Pigeons

SIX LITTLE DUCKLINGS

There were six little ducklings I once knew
(Hold six fingers up.)
A fat one, a skinny one, and that made two,
(Drop fingers, then hold up one and then
two fingers.)
But the one little duck with the feathers on
his back (Hold up just baby finger on left
hand.)
He ruled the others with his quack, quack, quack
(Put hands together, and do a very slow clap.
like a duck bill opening and closing)
Down the river they did go
With a wiggle and a waggle, to and fro.
(Wiggle body.)
But the one little duck with the feathers on his
back, (Hold up baby finger on left hand.)
He ruled the others with his quack, quack, quack,
(Hands together, slow clap)
Quack, quack, quack,
Quack, quack, quack.

LEFT-RIGHT

This is my right hand, Ha Ha Ha Ha Ha Ha
This is my left hand, Ha Ha Ha Ha Ha Ha
That's why I'm laughing with delight
I know my left hand from my right.

TWO LITTLE BLACKBIRDS

Two little blackbirds sitting on a hill,
One named Jack, one named Jill.
Fly away Jack, fly away Jill.
Come back Jack, come back Jill.
Two little blackbirds sitting on a hill,
One named Jack, and one named Jill.

Four little blackbirds sitting on a hill,
Two named Jack, two named Jill, etc.
Six little blackbirds sitting on a hill,
Three named Jack, three named Jill, etc.

FIVE LITTLE DUCKS

Five little ducks went out to play,
Over the hill and far away.
Mama duck said "Quack, quack, quack, quack
And four little ducks came running back.
(Repeat using smaller numeral until no
duck come back.) Flannel board figures are
good for this song.)

THREE LITTLE MONKEYS

Three little monkeys jumping on the bed,
One fell off and broke his head.
I called for the Doctor and the Doctor said,
That's what you get for jumping out of the bed!
Repeat: Two, one.

RHYTHM RECORDS

One of the advantages to using records is that the teacher is free to participate with the children. It is essential for her to know the record before attempting to use it. Many records use the technique of giving directions in song, and the actions are repetitive, allowing practice for the child. Some suggested records suitable for classroom use are:

Hap Palmer Records:
- Learning Basic Skills Through Music
  (Several in the series)
- Math Readiness, Vocabulary and Concepts
- Getting to Know Myself
- Patriotic and Morning Time Songs
- Movin'
- Pretend
- Feelings
- Spin Spider Spin
- Easy Does It
- Witches Brew

LeCrone:
- Carpet Squares
- Rhythm and Rhyme
- Color Me A Rainbow

Ella Jenkins:
- This-A-Way, That-A-Way
- You'll Sing a Song and I'll Sing a Song
- Adventures in Rhymthm
- Play Your Instruments
- Growing Up With Ella Jenkins

Educational Activities:
- Around the World in Dance
- Multi-Purpose Singing Games
- Simplified Folk Songs

Kaplan School Supply Corp:
- Activity and Funtime Songs
- Children's Dances Without Partners
- Pre-Physical Education Through Music

Kimbo:
- Dancing Numerals
- Fun Activities for Perceptual Motor Skills
- Simplified Lummi Stick Activities

Melody House:
- Cherry Ripe
- Creative Moods
- Tempo For Tots

Joe Wise:
- Close Your Eyes
- Show Me Your Smile
- Pockets

RHYTHM INSTRUMENTS TO MAKE

TAMBOURINE:

MATERIALS: 2 paper plates, hole punch, yarn, small bells, glue

PROCEDURE: Glue the rims of two paper plates together. When the glue is dry, punch holes at regular intervals around the plates. Lace yarn through the holes and add bells as you work around the rim.

SANDPAPER BLOCK:

MATERIALS: Medium sandpaper, 2 squares 4" x 4", two 4" pieces of 2" x 4" wood, glue

PROCEDURE: Glue sandpaper on blocks. Rub blocks together for an interesting sound.

RHYTHM STICKS:

MATERIALS: 2 dowels, two inches in diameter, or broom handles 10-12" long

SHAKERS:

MATERIALS: Plastic medicine bottles, all sizes, soap bottles, 2 small paper plates, film cans, tape, glue, tissue rolls

PROCEDURE: Partially fill any of the above items with rice, rocks, nails, paper clips, beans, bottle caps, pennies, rocks, old beads or anything else that will create noise. Each makes a different sound. Glue the lids on the bottles for safety. Flatten ends of tissue rolls, tape securely.

MATERIALS: Small aluminum pie tart pans, plastic spoons, beans or macaroni, stapler, or masking tape

PROCEDURE: Fill one pie tart pan partially with dried beans or macaroni. Cover it with another pan and put a plastic spoon between them. The bowl of the spoon goes inside and the handle becomes the shaker handle. Staple or tape all the way around the rims of the pans.

MATERIALS: Aluminum pie plates, spoon

PROCEDURE: A disposable pie plate from a frozen pie can become a percussion instrument by hanging it on a string and hitting it with a stick or spoon.

KAZOO:

MATERIALS: Paper tube, waxed paper, rubber band, hole punch

PROCEDURE: Punch a hole about one inch from the end of the tube. Cover the end with a piece of waxed paper. Use the rubber band to hold it in place. Hum a tune into the Kazoo for strange and wonderful sounds!

STRAW HORN:

MATERIALS: Plastic straw

PROCEDURE: Flatten and crease well one inch of the end of a plastic straw. Cut a "v" in the flattened end and blow! Shorter straws are easier to blow and make a higher pitched sound.

CLACKER:

MATERIALS: Two lids from baby food jars, glue (silicone is fabulous for this), spray paint (optional)

PROCEDURE: Spread glue around the edge of one lid. Stick the other lid on top to dry. Spray paint if desired. Push on the middle of the lids with your thumb and forefinger for the "clacking."

DRUM:

MATERIALS: Coffee cans (each size makes a different sound), plastic coffee can lids, pencils, spools

PROCEDURE: Cut the bottom out of the coffee cans. Cover the can with contact paper or let your child draw his own picture on paper to glue around the can. Glue plastic lids on each end of the can. Sharpen a pencil with a knife and glue the sharpened end into the hole in a spool for a drumstick.

Teacher Notes

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SOCIAL STUDIES

Social Studies is a means of helping children adjust to their society by guiding their development as they acquire basic concepts, ideals, and beliefs about the world in which they live. Children's social learning is related to interests that arise from their own experiences. They should have an appreciation of home, community, nation, and world. They should have some knowledge of American heritage, both geographic and economic. By acquiring an understanding of the past, children are able to comprehend contemporary issues. Children should have some knowledge of social problems within the realm of their understanding. They should acquire and practice the skills clustering around problem solving and decision making to help them accumulate experiences necessary for effective living.

ACTIVITIES

Me

ACTIVITY: Discovering Me-Body Awareness
Vicarious experiences - films, stories, pictures

MATERIALS: "Me" Bowmar; "If I Were" Educational Experiences Western Pub.; "The Body", "Face", "Hands and Arms" I SEE YOU AND ME Scott Ed. Division; "The Joy of Being You" Who Am I

PROCECURE: Read, observe, discuss.

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ACTIVITY: Discovering Me-Body Awareness
Real experiences-self portrait

MATERIALS: Long sheets of paper, crayons, paint, etc.

PROCEDURE: Trace around the child while he lies on the paper. Paint or color the body, labeling the parts, or draw or create a picture of self using various media.

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ACTIVITY: Discovering Me-Body Awareness
Real experiences-fingerprint chart

MATERIALS: Posterboard, inkpad, magnifying glass

PROCEDURE: Make and label each child's fingerprints. Place them on a chart. Examine the differences.

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ACTIVITY: Discovering Me-Body Awareness
Real experiences - "Me" Book

MATERIALS: Paint, crayons, paper, scissors

PROCEDURE: Assemble a booklet about "Me". Include child made pictures of self, family, pet, hand and footprints, etc.

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ACTIVITY: Discovering Me-Body Awareness
Real experiences - silhouettes

MATERIALS: Bright light (projector), white paper, pencil, black paper, glue

PROCEDURE: The teacher then traces shadow of the child's head on white butcher paper as the child sits in front of a bright light. Transfer it to black paper, cut out and mount. Use as guessing game and display around the room.

* * *

ACTIVITY: Discovering Me-Body Awareness
Real experiences-self puppet

MATERIALS: Scissors, paste, paper, scrap material, sacks, etc.

PROCEDURE: Have each child make a self-puppet. (Stick puppet, sock, or sack puppet.)

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ACTIVITY: Discovering Me--Body Awareness
Real experiences--flannel board
MATERIALS: Felt body parts, flannel board
PROCEDURE: Build a body on the flannel board.

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ACTIVITY: Discovering Me--Body Awareness
Real experiences--music, fingerplays
MATERIALS: "Hokey Pokey", "Touch Your Shoulders"
PROCEDURE: Group participation

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ACTIVITY: Discovering Me--Feelings
Various experiences--pictures, films, books
MATERIALS: "You Are Somebody Special", "The Importance of You", "Expressions", I See You and Me, Scott Ed. Division, "All Kinds of Feelings", Who Am I; "Love and Emotions", Bowmar

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ACTIVITY: Discovering Me--Feelings
Real experiences--role playing, puppets
MATERIALS: Puppets and role-playing cards from the DUSO series (Developing Understanding of Self and Others) American Guidance Service

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ACTIVITY: Discovering Me--I'm Growing
Various experiences--books, stories
MATERIALS: Inch by Inch, L. Lionni; Growing Story, R. Kraus; Tomorrow You Can, D. Corey
PROCEDURE: Read, discuss.

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ACTIVITY: Discovering Me--I'm Growing
Real experiences--grow chart
MATERIALS: Long strips of paper, marking pen
PROCEDURE: Have child stand up to the paper tacked on wall. Mark height. Label. Remeasure during the year.

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ACTIVITY: Discovering Me--I'm Growing
Real experiences-photographs
MATERIALS: Baby pictures, recent photos
PROCEDURE: Have each child bring a baby picture. Display, discuss, compare with recent photos.

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Me-Others

ACTIVITY: Discovering Me and Others: At Home-Family
Vicarious experiences-books, filmstrips
MATERIALS: Books:
Are You My Mother? Eastman
The Daddy Book Stewart
Have You Seen My Brother? Guifoile
A New Baby Is Coming to My House Iwasaki
Filmstrips:
"My Family" The Importance of You BFA
PROCEDURE: Read, observe, discuss.

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ACTIVITY: Discovering Me and Others-At Home-Family
Real experiences-family picture
MATERIALS: Paper, crayons, etc.
PROCEDURE: Each child draws a picture of his family. Label members.

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ACTIVITY: Discovering Me and Others: At Home-Family
Real experiences-my home
MATERIALS: Various media
PROCEDURE: Each child draws a picture (may be put in "Me" book).

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ACTIVITY: Discovering Me and Others: At Home-Family
Real experiences-flannel board, figures
MATERIALS: Old magazines, scissors, sandpaper
PROCEDURE: Discuss members of a family. Children may use figures to represent his family on flannel board.

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ACTIVITY: Discovering Me and Others: At Home-Family
Real experiences-V.I.P. bulletin board
MATERIALS: Small portable bulletin board, pictures the children bring from home
PROCEDURE: Assign each child a special week or period of time when they can bring pictures of themselves, their family, pets, etc., to place on the bulletin board. Discuss.

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ACTIVITY: Discovering Me and Others: At Home-Family
Real experiences-puppets
PROCEDURE: Each child introduces all the members of his/her family. As each is introduced, the child tells how he/she helps the family.

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ACTIVITY: Discovering Me and Others: At Home - Friends and Neighbors
Vicarious experiences-books, filmstrips
MATERIALS: books:
Best Friends Brown
That's What Friends Are For Heide & Clief
Let's Be Enemies Udry
Little Dog Lost
Tawny Scrawny Lion
Filmstrips:
"What Is a Friend" The Importance of You BFA
Pear-Shaped Hill Educational Experiences Western Publishing
PROCEDURE: Use books and films to illustrate getting along with friends and meeting new friends.

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ACTIVITY: Discovering Me and Others: At Home - Friends and Neighbors
Real experiences-role playing
MATERIALS: DUSO series (American Guidance Service) role-playing cards

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SCHOOL

ACTIVITY: Discovering Me and Others: At School-people
Vicarious experiences-books about classmates, teachers
MATERIALS: Crow Boy Yashima
What May Jo Shared Udry
Will I Have a Friend? Cohen
PROCEDURE: Read and discuss.

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ACTIVITY: Discovering Me and Others: At school-people
Real experiences-a "classmate" book
MATERIALS: paper, crayons
PROCEDURE: Make a book depicting each child in the class.

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ACTIVITY: Discovering Me and Others: At School-people
Real experiences-meet other children, other adults
PROCEDURE: Exchange visits with other rooms; meet other adults at school

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ACTITITY: Discovering Me and Others: At School-environment
Vicarious experiences-pictures, books
MATERIALS: Let's Start Picture Box: School Experiences
Through the Day Early Childhood Series, Bowmar

PROCEDURE: Read and discuss.

* * *

ACTIVITY: Discovering Me and Others: At School-environment
Real experiences-school map
MATERIALS: Newsprint, magic markers, crayons
PROCEDURE: Tour the school and grounds. Discuss the different things observed. Introduce the word "map", what it means, why people use maps, what goes on a map. Let children work in small groups to draw a map of the school and grounds. Display.

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ACTIVITY: Discovering Me and Others: At School-environment
Real experiences-helpers chart
PROCEDURE: Enable children to know their responsibilities through daily activities.

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ACTIVITY: Discovering Me and Others: At School-environment
Real experiences-room maps
MATERIALS: Paper, pencils, rulers, crayons
PROCEDURE: Make maps of the classroom locating doorways, windows, desk areas, center areas, blackboard, etc.

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A Larger World

ACTIVITY: Discovering a Larger World-Neighborhood experiences
Real experiences-maps
MATERIALS: Paper, crayons, markers
PROCEDURE:
1. Take a walk to see what is in our neighborhood. Make a map emphasizing special places (park, etc.).
2. Visit place on the map. Write and illustrate stories.

* * *

ACTIVITY: Learning About Maps, Globes and Compass
MATERIALS: Filmstrips:
"Using Globes, Set 1" (McGraw-Hill)
"How to Use Maps and Globes" (Troll)
"Maps Show Us Where" (ERS)
"Let's Make A Map" (BFA)
"What's A Compass" (NBC)
Atlases, orange, knife
PROCEDURE: Observe and discuss. Peel an orange to discuss distortion produced by trying to lay the peeling flat. Display and discuss the relationship of nations to continents, states to nations, etc.

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ACTIVITY: Discovering a Larger World-Community
Vicarious experiences-books
MATERIALS: Little Dog Lost
Bowmar Monster Series
PROCEDURE: Read, discuss. Take an imaginative trip.

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ACTIVITY: Discovering a Larger World-Community
Real experiences-field trips
PROCEDURE: Take field trips to see people and places of special interest (bakery, department store, park, fire station, post office, dentist, library, etc.).

* * *

ACTIVITY: Other People--Other Places
Various experiences--pictures, stories, music, films
PROCEDURE: Show pictures of various cultures, read stories, show films, listen to music from various cultures.

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ACTIVITY: Other People--Other Places
Real experience--anthropology, increasing awareness and tolerance of similarities and differences
MATERIALS: Butcher paper, magic markers, crayons
PROCEDURE: Using graphing procedures, the students record personal data related to hair color, eye color, height, weight, preferences, etc. Discuss (relate values, differences, similarities).

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ACTIVITY: Other People--Other Places
Real experiences--field trips
PROCEDURE: Visit cultural places (museums, exhibits, programs). Invite children to bring articles from various cultures.

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ACTIVITY: Other People--Other Places
Real experiences--Indian Unit
MATERIALS: Scrap material, paper glue, feathers, old sheet, paint, poles, etc.
PROCEDURE: Make a large tepee for the room Use it in a center. Let the children paint Indian symbols on it. Make other Indian crafts (rattles, drums, headbands, etc.)

* * *

ACTIVITY: Other Cultures
PROCEDURE: Invite someone in the community to share articles.

* * *

ACTIVITY: Cultural Awareness--Thanksgiving
MATERIALS: Paper, glue, etc.
PROCEDURE: Make Pilgrim hats to wear. Have a feast. Each child brings something to share and eat. Some children dress as Indians, some as Pilgrims. Invite another room.

* * *

ACTIVITY: Economics-Earning and Spending
MATERIALS: Filmstrips:
"Where Do We Get Our Lumber?"
"Where Do We Get Our Paper?"
"Where Do We Get Our Milk?"
"Where Do We Get Our Bread?"
"Where Do We Get Our Meat?"
"Where Do We Get Our Iron?"
"Where Do We Get Our Seafood?"
PROCEDURE: Discuss how people use resources to meet their needs. They "earn" by supplying goods and services; they "spend" by buying goods and services they need.

* * *

ACTIVITY: Economics-Buy and Sell
Real experiences-earning and spending
MATERIALS: Craft items, play money
PROCEDURE: Have children make a craft item which they wish to sell to another student. They will receive play money in return with which to buy someone else's craft. Provide each child with $10 in play money. The "Seller" sets the price of his item, not to exceed $10.

* * *

ACTIVITY: Economics-Sharing Resources (unlimited wants/limited means)
MATERIALS: 2 large sheets of paper, 2 smaller sheets of various colors, 1 box crayons, 2 pair scissors, 1 container of glue
PROCEDURE: Use an art activity which requires paper, crayons, scissors, glue, etc. Inform students that these are the resources which may be used. Do not discuss need for sharing resources prior to actual art product. Observe students throughout project to determine when or if discussions are needed related to limited resources, cooperation, sharing. Further projects might relate to sharing and conserving natural resources.

* * *

ACTIVITY: Economics-Wants and Needs-Dream Cloud Pictures
MATERIALS: White sheets of paper, crayons, magic markers
PROCEDURE: Each child draws picture of something he/she wants, then cuts it out in the shape of a cloud. Pictures can be placed on a bulletin board to be used in a class discussion of wants and needs.

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ACTIVITY: Transportation (types)
MATERIALS: Posterboard, pencils, crayons
PROCEDURE: Make posters of various types of transportation and types of goods transported.

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ACTIVITY: Transportation (types)
MATERIALS: Photographs, pictures
PROCEDURE: Discuss types of air, sea and ground transportation, careers, types of energy used. Invite resource person to speak.

* * *

ACTIVITY: Communication-Our Senses
MATERIALS: Jar of cider, vinegar, jar of tea (labeled x and y)
PROCEDURE: Let children guess what might be in the jars. Next shake the jars and have them decide if this helps them to know what is in the jars. Next, blindfold them and let each smell the contents. Discuss which sense helped them know what was in the two jars.

* * *

ACTIVITY: Communication-Language
MATERIALS: World map
PROCEDURE: Discuss relationship of tongue and language. Discuss different languages from different parts of the world. Ask if any of the children speak a language other than English.

* * *

ACTIVITY: Communication-Sounds
MATERIALS: Small bell, sheet of paper, triangle
PROCEDURE: Have children close their eyes and listen carefully to a variety of sounds: ring the bell; rustle the paper; strike the triangle. Discuss the differences.

* * *

ACTIVITY: Communication-Sounds
MATERIALS: Tuning fork, glass of water
PROCEDURE: Demonstrate the principle of sounds invisible waves by striking a tuning fork and then placing it in a glass of water. Be sure the children understand that the waves produced are caused by sound waves.

* * *

ACTIVITY: Communication-Telephone
MATERIALS: Black and white paper, scissors
PROCEDURE: Cut large black circles for 9" x 12" sheets. Cut ten white circles about the size of a quarter. These will be numbered as follows:
1 - ABC - DEF - GHI - JKL - MNO - PRS - TUV - WXY
2 3 4 5 6 7 8 9
and 0 Operator.

* * *

ACTIVITY: Communication-Radio and television
MATERIALS: Pictures

PROCEDURE: Discuss kinds of radios (automobile, two-way radios, walkie-talkies, citizen band, radios on planes, etc.). Discuss kinds of programs. Discuss the differences in transmitting radio and television programming. Discuss the kinds of careers available.

* * *

ACTIVITY: Communication-Satellites

MATERIALS: Diagram of man-made satellite, bucket (half-filled with water)

PROCEDURE: Explain how satellites are used to transmit information. Use the bucket to demonstrate how a satellite stays in the air, just as the water stays in the bucket when swung around.

* * *

ACTIVITY: Communication-Postal Service

MATERIALS: Empty half-gallon milk cartons, knife

PROCEDURE: Make post office boxes by cutting the open end from the milk carton. Stack in rows. Label with children's names. Make a post office center. Discuss addressing envelopes, stamps. Visit the local post office to observe how mail is handled. Write a thank you letter from the class to the postal center. Walk to a nearby letter box and mail it.

* * *

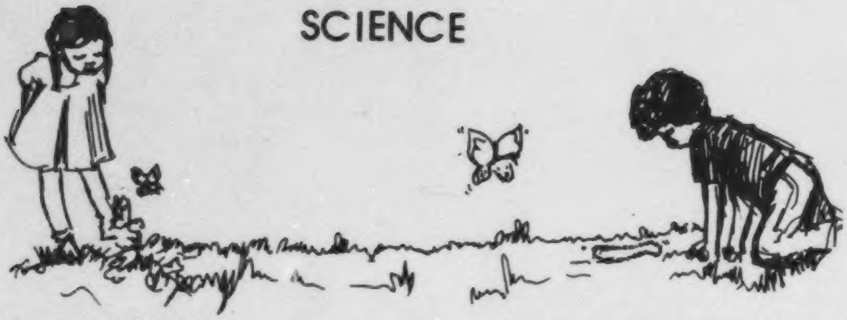
ACTIVITY: Communication-Newspapers

MATERIALS: Copies of newspapers, construction paper, glue, scissors

PROCEDURE: Cut out different types of articles. Make booklets or glue them on large sheets of newsprint to assemble another paper. Write a class newspaper. Make up ads for the paper. Illustrate.

* * *

SCIENCE



Science is the world around us! For young children it is .....

....pausing to wonder, reflect, and speculate; developing a keen sense of observation;
....seeking and searching for explanations; how spiders and crabs are alike;
....gaining knowledge to help them interpret the world around them - wearing a coat keeps me warm on a cold day;
....exploring the various aspects of the natural environment - tasting, touching, smelling, looking, hearing;
....questioning conditions and events around them - how can water turn hard?

Science activities help to develop an inquiring and experimental approach to answering questions and solving problems. We must provide appropriate equipment and materials for exploring and experimenting and give simple, accurate information according to the developmental level of the children.

Basic equipment should include:

- magnets - horseshoe, bar
- iron filings
- prisms
- magnifying glasses
- aquarium
- thermometer
- clock
- timer
- pulley
- color paddles
- flasnlight
- collection of nature items
  wasp nest, insects, shells, rocks, seeds, pine cones, plants, bird nests
- feely box - fabric, objects
- resource books to answer questions

Themes that might be developed into science centers:

- Ecology
- Rocks
- Dinosaurs
- Magnets
- Energy
- Sea World
- Creepy Crawlers
- Birds
- Seeds
- Five Senses
- Nutrition

The center should be changed when the child is no longer showing interest.

ACTIVITIES

Air

RESOURCES: Guppies, Bubbles, and Vibrating Objects
by McGawack and LaSalle

The Wonders of Science
Encyclopedia Britannica by Western

FILMSTRIPS: "Air is Real" (ESC)
"Air Around Us" (SVE)
"Balloons and Bubbles" (Troll)

* * *

ACTIVITY: Feeling air

MATERIALS: Fan made from paper or cardboard

PROCEDURE: Fan face with hands, "What do you feel?" Fan face with paper or cardboard. "What do you feel now?" Does your hand or the paper fan you best?

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ACTIVITY: Air fills space

MATERIALS: Paper sacks

PROCEDURE: Supply each child with a paper sack. Children blow air into sack. Children burst sack and discuss what happened to the air before and after they popped the sack.

* * *

ACTIVITY: Air moves objects

MATERIALS: Kites, pinwheels, balloons, crepe paper to make colored streamers

PROCEDURE: Take advantage of the wind. Take kites, balloons, or pinwheels outside. Make wristlet with colorful streamers. Tie streamers to jungle gym or trikes. Take a walk on a windy day and observe what is being blown. Make a chart of things that moved and things that did not move.

* * *

ACTIVITY: Air moves objects

MATERIALS: Balloons, large pan of water, water table

PROCEDURE: Give each child a balloon. Have children blow up balloons. Discuss what is inside balloon. (If balloon is blown up too much, discuss why it might pop.) Let balloons go, and observe what happens. "What made the balloon move?" "What sound did the balloon make?"

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Experiment with rate of escaping air. One child blows up balloon and holds it. Second child feels air escape by placing hand over opening. Child holding balloon lets air escape faster or slower by pulling balloon opening.

Allow air to escape from balloon in water. Observe the bubbles. "What are bubbles?"

* * *

ACTIVITY: Air is matter

MATERIALS: Pictures, paper

PROCEDURE: Make a display of pictures to demonstrate that air is matter. Show pictures of balloons, an inflated plastic bag, a toy pinwheel, a folded paper fan, pictures of windmills, kites, trees blowing in the wind.

* * *

ACTIVITY: Weight of air

MATERIALS: Plastic bags, string, bolts

PROCEDURE: Have children make parachutes of plastic squares cut from the bags. Tie strings to four corners and secure to bolts. Let children fold up parachute and toss into air.

* * *

ACTIVITY: Air movement

MATERIALS: Squares of paper, straight pins, pencils

PROCEDURE: Make individual pinwheels by pinning corners of paper to eraser of pencil. Let children experiment with the pinwheels by running with them, standing still, moving them up and down.

* * *

ACTIVITY: Air reactions

MATERIALS: Glass jar, crumpled paper

PROCEDURE: Place jar in water upside down so that no water enters. Discuss why no water can get into jar. Put paper in bottom of jar. Immerse jar upside down in water. Discuss what will happen to paper. Observe results.

* * *

ACTIVITY: A flame needs oxygen

MATERIALS: Candle, matches, jar, baking soda, vinegar, spoon

PROCEDURE: Set up materials. Light candle and place in jar. Spoon soda in jar around candle. Add vinegar. "What is happening? Why did the flame go out?" In experiments, compare by counting length of time it takes the candle to go out. Write an experience story.

* * *

ACTIVITY: The magic egg

MATERIALS: Hard-boiled egg, paper towel, match, milk bottle

PROCEDURE: Remove the shell from the hard-boiled egg. Roll the paper towel into a cylinder. Light the towel with a match. Drop the burning towel into the milk bottle. Quickly place the small end of the egg on the mouth of the bottle. The egg bounces up and down a few times. Then the fire goes out. With a pop, the egg bounces into the bottle.

* * *

Water

RESOURCES: "Water Servant to Man", filmstrip (Troll)

* * *

ACTIVITY: Liquid takes shape of container

MATERIALS: Water table, water, various containers

PROCEDURE: Set table with equipment. Observe and discuss differences of various containers (tall and skinny, short and wide). Pour equal amounts of water into each container. "Which one looks like it holds the most?" Measure again to show that the volume of water is the same and water takes the shape of its container. Extension: water table.

* * *

ACTIVITY: Evaporation

MATERIALS: Paint brushes, cans, water

PROCEDURE: Have enough cans and brushes for at least half of class. Fill cans half full of water. Give child brush and can; paint outside. Observe what happens to water on concrete, fence, side of building.

* * *

ACTIVITY: Evaporation

MATERIALS: One glass jar with lid, one glass jar without lid, water, two rubber bands

PROCEDURE: Fill two jars with equal amounts of water. Put rubber bands around jar at water line. Put lid on one jar. Observe what happens to the water in each jar. Discuss water levels and where the water has gone using word evaporate frequently.

* * *

ACTIVITY: Air and water weight

MATERIALS: Balancing scale, two identical containers, water

PROCEDURE: Have table set up with materials. Discuss empty containers. "What is inside the containers?" "AIR". Place containers on balance scale, and observe that weight is the same. "What will happen if water is added to one container?" Fill one container and weigh on balance scale. "Which weighs the most?" "Why does the one with water in it weigh more?"

* * *

ACTIVITY: Water weight

MATERIALS: Water, pan or water table, various objects, oaktag, magic marker, sink and float trays (two trays labeled sink and float used for classifying objects)

PROCEDURE: Sink and float. Prepare for experiment. Place one object in water. "What happens?" Repeat procedure with other objects, one at a time. Let children observe and discuss what happens to each object. Stress vocabulary. Discuss why things float. (They are lighter or weigh less than water.) Why do things sink? (They are heavier or weigh more than water.)

* * *

ACTIVITY: Water reaction states

MATERIALS: Ice in tray

PROCEDURE: Solid: Bring ice in tray. Observe and touch. "How does it feel?" "What is ice?" "What will happen if the ice is left on the table?" Observe ice melting at different intervals.

* * *

ACTIVITY: Water will travel

MATERIALS: Two glasses, water, strip of an old bath towel

PROCEDURE: Stand two glasses side by side. Fill one with water. Cut a strip about an inch wide from an old bath towel. Put one end in one glass and the other in the other glass. Let the glasses stand overnight. Water will travel slowly through the cloth from one glass to the other.

* * *

ACTIVITY: Snow to water

MATERIALS: Measuring cup, snow

PROCEDURE: Discuss snow. Fill measuring cup with snow. Bring indoors and place on table. Observe as snow melts. After snow has melted, measure water. "How much snow did we have?" "How much water do we have now?" "What is snow?" TIP: About ten cups of snow equals one cup of water.

* * *

ACTIVITY: Steam

MATERIALS: Popcorn popper with clear lid, water

PROCEDURE: Gas: Introduce children to water which has become a gas: steam and evaporation. Boil water without lid. Observe bubbles and discuss safety with heat. "What is happening to the water?" "What is coming up from the water?" Talk about the word STEAM. Place lid on pan. "What is happening to the steam?" Take lid off and show water that has formed on the inside of lid.

* * *

ACTIVITY: Mixing water

MATERIALS: Water, sand, container, spoon

PROCEDURE: Mixture: Fill container with water. Spoon sand into water. Stir sand and observe it sinking to the bottom. "Does the sand dissolve in the water?" The sand is heavier than the water and becomes a mixture. (Oil may be used as another mixture that is lighter than water.)

* * *

ACTIVITY: Evaporation

MATERIALS: One teaspon salt

PROCEDURE: Solution: Experiment as above. Dissolve salt in water. "Can you see the salt?" "Can you taste it?" "Where did the salt go?" Pour salt water mixture in pie pan and leave to evaporate. "What do you see?" "Where did the water go?"

* * *

ACTIVITY: Colloid

MATERIALS: Ingredients needed for making Jello

PROCEDURE: Colloid: Set up materials. Make Jello as package directed. "What has happened to Jello?" "Is it like the salt in water?"

* * *

ACTIVITY: Sources of water

MATERIALS: U. S. map, world globe

PROCEDURE: Compare the map and the globe to determine which shows more water. On the map locate an ocean, a lake, a river, a stream.

* * *

ACTIVITY: Plant survival

MATERIALS: Freshwater aquarium plants, two large jars or tanks, fresh water, and salt water

PROCEDURE: Place two healthy freshwater aquarium plants in aquarium or large jar filled with fresh water and in one filled with salt water. Observe the difference in what happens to the plants, one in fresh water and one in salt water.

* * *

ACTIVITY: Condensation

MATERIALS: Ice cube, paper towel, pastic bag

PROCEDURE: Wrap an ice cube in a paper towel. Place it in a plastic bag, inflate the bag and close it securely. Have the children note from day to day how water vapor condenses on the inside of the bag. Open the bag and look for the ice cube. Reseal the bag, put it in the freezer for a day, and examine the contents again.

* * *

ACTIVITY: The water cycle

MATERIALS: Large drawing paper, crayons, scissors, construction paper

PROCEDURES: Draw pictures in which water, clouds, and land are visible; mark the water cycle on them. Show snow as well as rain. Paste the pictures on sheets of construction paper. Draw a simple jig-saw puzzle pattern on the back of the papers and cut the pieces apart. Store puzzle pieces in envelopes.

* * *

ACTIVITY: Need of water for survival

MATERIALS: Heads of lettuce, plastic bags

PROCEDURE: Break a head of lettuce into parts. Place some in a tightly sealed plastic bag and store in a cool, dark place. Place the rest on the window sill in the sun. Compare after several hours.

* * *

ACTIVITY: Water's effect on other substances

MATERIALS: Cups of water, various substances

PROCEDURE: Provide each child with cup of water and one of several substances: Jello, bread, sugar cubes, Lifesavers, marbles, macaroni, sand, soil, etc. Have children predict what will happen when each is placed in water.

* * *

Magnets

RESOURCES: "Magnets Push & Pull", filmstrip (Troll)

* * *

Mickey's Magnet, (refer to Bibliography)

ACTIVITY: Magnets attract some objects

MATERIALS: Various attracting and non-attracting objects on tray (two trays labeled Yes and No for classifying), different sizes of magnets

PROCEDURE: Arrange a "Do Touch" display of various magnets or pictures of magnets. Place a number of materials on display for children to test (magnetic and non-magnetic).

* * *

ACTIVITY: Making magnets

MATERIALS: Needles or pins, magnets

PROCEDURE: Let children pick up pins with magnets. Give each child a magnet and two pins. Stroke magnet with one pin 20 times in one direction. Try to pick the other pin up with the magnetized pin. "How did the pin become a magnet?"

* * *

ACTIVITY: Magnets attract some objects but not others

MATERIALS: Pre-cut paper fish, paper clip for each fish, magnet on string connected to pole

PROCEDURE: Play the Fishing Game: Put a paper clip on nose of each fish. Place all fish in large box. Let children take turns catching fish with pole. After exposure, take several clips off fish. "Why can't you catch some of the fish?"

* * *

ACTIVITY: Magnets attract objects through various mediums

MATERIALS: Construction paper, paper clips, magnets

PROCEDURE: Let children experience magnets attracting objects through various mediums.

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Light

RESOURCES: Pictures
Light for Beginners, filmstrip at ESC

The Wonders of Science, Western Publishing Co.

* * *

ACTIVITY: Light sources

MATERIALS: Candle, matches, desk lamp, filmstrip projector, flashlight, batteries, mirror

PROCEDURE: Expose children to a variety of light sources, e.g., fire (candle in darkened room), sun (close window shades to darken room), moon, electrical (room light from film-strip projector), battery (flashlight). "Where does light come from?" "How can we make light?" "Why do we need light?"

Stress the important role our eyes play in seeing light.

A mirror reflects light. Use the wall mirror for chidren to view their reflections. "What do you see?" "What else did the mirror reflect?" To show that a mirror needs light to reflect images, put mirror in front of children and make room very dark.

* * *

ACTIVITY: Light reflection

MATERIALS: Pictures, prism

PROCEDURE: Talk about a rainbow. "What color is a rainbow?" "What makes a rainbow?" Use a prism to extend this concept.

* * *

ACTIVITY: Shadows

MATERIALS: Film-strip projector or flashlight

PROCEDURE: Prove that shadow is caused by blockage of light. Children go outside. "Can you see yourself?" Line a small group of children up so shadows are in front. "Can you find your shadow?" "How can you tell it is yours?" "What causes a shadow?" Play shadow tag. On a cloudy day, go outside to find shadow.

With a filmstrip projector or flashlight, let children experiment with making shadows.

* * *

ACTIVITY: Me and my shadow

MATERIALS: Sunshine, chalk, concrete area which is not shaded during the day and which will accommodate each child's personal space.

PROCEDURE: Observe students to determine awareness of shadows. This activity may have more impact if students have begun linking the shadow's movement with their own body movements. Have students select partners or draw names. Walk to a large concrete area three times throughout the day. Have each student outline his/her partner's footprints with name. Outlining the footprints during the early morning trip will help to insure that students do not change their positions. Students should also trace around their partner's shadow. It may be beneficial to label shadows "A.M., P.M.", or to use different colored chalk for each visit. Discussions should be generated concerning why the shadow moved when students did not change direction or body position.

Students and their partners should return to their personal footprints two more times throughout the school day (noon, afternoon before leaving school). Each visit, students should outline partner's shadow.

* * *

ACTIVITY: Light reflection

MATERIALS: Glasses and bowls, water, objects such as straws and pencils

PROCEDURE: Partially fill glasses and bowls with water and let the children put their fingers, pencils, and straws inside and view from the outside. The submerged part will look larger and the object will look broken. Let the children experiment and see how different things look through curved and flat transparent glass, through glass and water, and through glass alone.

* * *

ACTIVITY: Shadows

MATERIALS: Paper, pencil, projector, mounting paper

PROCEDURE: Make silhouettes of children.

* * *

Mechanics

RESOURCES: How Wheels Help Us
What's So Important About a Wheel?, filmstrip (ESC)

* * *

ACTIVITY: Wheels

MATERIALS: Wheels, wheelbarrow or wagon

PROCEDURE: Demonstrate that wheels help us move things faster and with less effort. Carry blocks from one area of room to another. "How can we do this faster?" Use a wheelbarrow or wagon to move the blocks. "Was it easier to carry the blocks or use the wagon?"

Repeat experiment using children. One child sits on the floor. Another child tries to pull him/her. "What can you use to make it easier to pull him/her?" Child gets into wagon and is pulled. "Which way was easier to move him/her?"

* * *

ACTIVITY: Balances

MATERIALS: Number balance, pan balances (two), various objects in room

PROCEDURE: Expose children to pan balance scale. Use materials in room with scales. Balance identical objects, e.g., counting blocks. Balance different objects, e.g., bottle caps and blocks.

Use number balance to extend balance concept and numerical value.

* * *

ACTIVITY: Balance

MATERIALS: Paper, magic marker

PROCEDURE: Write rebus chart of balance equations.

* * *

ACTIVITY: Locks and keys

MATERIALS: Piece of wood, locks attached to wood, different kinds of locks, e.g., chain lock, bar lock, padlock key lock, hook and eye lock, etc.

PROCEDURE: Make a gadget board using various kinds of locks and keys. Children manipulate locks to see how they work.

* * *

ACTIVITY: Hinges

MATERIALS: Piece of wood, hinges of various types and sizes

PROCEDURE: Make a gadget board using different kinds of hinges.

* * *

ACTIVITY: Nuts and bolts

MATERIALS: Box of various size nuts and bolts

PROCEDURE: Create a gadget box from nuts and bolts

* * *

ACTIVITY: Machines

MATERIALS: Old machines: coffee pot, alarm clock, toaster, radio, vacuum cleaner

PROCEDURE: Take old appliances apart to observe and manipulate.

* * *

Electricity

RESOURCES: "Flash, Crash, & Glow: Electricity in a Bulb", filmstrip (Troll)

* * *

ACTIVITY: Static electricity

MATERIALS: Balloons for each child

PROCEDURE: Give each child a balloon. Blow up and tie knot in balloon. Rub balloon on coat or sweater. Put balloon on wall. Observe what happens. Static electricity has been created by rubbing the balloon on hair.

* * *

ACTIVITY: Static electricity

MATERIALS: Sheets of paper, plastic wrap, tissue

PROCEDURE: Distribute half-sheets of paper and pieces of plastic wrap to children. Have them place the plastic over the paper and rub it with a tissue or the side of their hands. Ask the children to describe what is happening.

* * *

ACTIVITY: Batteries

MATERIALS: Flashlight, batteries

PROCEDURE: Introduce flashlight. Turn switch on and off while asking questions about observations. "Why did the light come on?" Take flashlight apart. Introduce new word battery. With flashlight empty, turn switch on. "Why doesn't it work?" Demonstrate how batteries fit together and reassemble flashlight. Children manipulate flashlight and its components.

* * *

ACTIVITY: Batteries

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MATERIALS: Dry cell battery with color coded circuitry, color coded wires, light

PROCEDURE: Demonstrate how electricity works by connecting a light or bell assembly to a dry cell battery. Explain procedure while demonstrating. Provide rebus control card so children can experiment by themselves.

* * *

Weather

RESOURCES:

"Understanding Weather", Visual Materials, Inc.

"I Can Read About Weather", kit (Troll Read-a-Longs)

"Finding Out About Clouds", filmstrip (SVE)

"True Book About Weather Experiments" (SVE)

"Weather & Climate", four filmstrip set (Troll)

* * *

ACTIVITY: Kinds of weather

MATERIALS: Observe various kinds of weather, e.g., rainy, stormy, snowy, sunny, cloudy, windy, foggy

PROCEDURE: Teacher initiates discussion on weather when changes occur and/or when children show interest.

* * *

ACTIVITY: Importance of weather

MATERIALS: Observe various kinds of weather

PROCEDURE: Game: "What I Want To Be When I Grow Up". For each occupation named, have the children discuss how weather conditions might affect such a job.

* * *

ACTIVITY: Weather symbols

MATERIALS: Homemade weather chart with simple illustrations

PROCEDURE: Children indicate weather on the chart with appropriate symbol for that day.

* * *

ACTIVITY: Classifying clothes

MATERIALS: Homemade classification game--Dress for weather

PROCEDURE: Children classify clothing appropriate for rainy days, sunny days, cold days, etc.

* * *

ACTIVITY: Weather forecasting

MATERIALS: Charts, graphs, marking pens, thermometers, barometers, weather vanes, etc.; books related to weather, cloud formations, etc.

PROCEDURE: Children gather weather information daily and record on charts and graphs. Students begin making predictions about future weather based on past displayed and/or observed data (sky color, cloud formations, windy days/rain cycle, etc.).

* * *

ACTIVITY: Temperatures

MATERIALS: Two thermometers, two bowls, ice, hot water

PROCEDURE: With thermometers, measure temperature bowls filled with ice and hot water. Talk about hot and cold. Observe thermometer change in each bowl. Discuss that heat makes mercury rise and cold makes mercury fall.

* * *

ACTIVITY: Temperature

MATERIALS: Two thermometers

PROCEDURE: Place one thermometer outside window so that it is visible from inside. Place second thermometer in the room away from source of heat. Observe and compare different temperatures in either group discussion or individual experiences.

* * *

ACTIVITY: Temperature

MATERIALS: Teacher-made thermometer

PROCEDURE: Make a large thermometer for room display. Use red felt for mercury. Cut small slit in bottom and slip felt through opening. Adjust to temperature level.

* * *

Rocks

ACTIVITY: We use rocks for many things

MATERIALS: Rocks

PROCEDURE: Help children become aware that rocks are useful. Go on a walk to discover things that are made from rocks. Make a rebus chart of the things that are found.

* * *

ACTIVITY: Rock hounds

MATERIALS: Egg cartons, magnifying glasses

PROCEDURE: Go on a walk to collect rocks. Have egg cartons and magnifying glasses ready for children to sort and examine their findings. Children may sort rocks according to differences: large-small; smooth-rough; shiny-dull; different colors.

* * *

ACTIVITY: Rocks - how they change

MATERIALS: Water, pan, soap, toothbrush

PROCEDURE: Wash rocks and observe. "Do they look different?" "Which ones stayed togehter?" "Which ones crumbled?'

* * *

ACTIVITY: Rocks - what are they made of?

MATERIALS: Hammer, rocks

PROCEDURE: Crack rocks with hammer to see inside.

* * *

ACTIVITY: Pet rocks

MATERIALS: Tempera paint, brushes.

PROCEDURE: Paint rocks with tempera paint. Paint nose, eyes, mouth, etc. Give your rock a name.

ACTIVITY: Salt crystals

MATERIALS: Salt, water, glass jar, paper cup

PROCEDURE: Make a solution of salt and water. Pour half solution into glass jar and half into paper cup. Observe crystals that form on inside of glass jar and outside of paper cup.

* * *

ACTIVITY: Colored salt crystals

MATERIALS: Low glass dish, coal, common salt, blueing, water, ammonia, tablespoon, bowl, medicine dropper, food coloring

PROCEDURE: Make a chemical garden. Place coal in a low dish with a little water. Make chemical mixture by combining ingredients in a bowl and mix well: Six T. salt, six T. blueing, six T. water, one T. ammonia. Pour mixture slowly over coal. For color, use medicine dropper to drop food coloring over mixture. In a short time crystals begin to form. Observe shapes of crystals; add a little more ammonia water.

* * *

ACTIVITY: My chemical garden

MATERIALS: Paper, magic marker

PROCEDURE: A rebus chart of procedure is useful for children in making their own chemical garden.

* * *

ACTIVITY: Fossils

MATERIALS: Plaster of paris, water, pan, mixing spoon, empty lunchroom milk cartons (one per student, tops should be cut from cartons), various nature objects (shells, twigs to represent bones, rocks, seeds, etc.), clay

PROCEDURE: Students press approximately 1/2" clay into bottom of empty milk carton. Clay surface is then smoothed by students with fingers--this will take some patience! Students select objects and press firmly into clay. Objects are removed and impressions remain. Students and/or teacher mix plaster of paris and pour about 1" into each milk carton. When dry, student tears off milk carton and pulls clay away from plaster of paris which reveals the fossil impressions made in clay.

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Animals

ACTIVITY: Classroom pets

RESOURCES: Animals in the classroom (gerbils, aquariums, birds, mice, hamsters, rabbits, etc.)

PROCEDURE: Children help with the responsibility of feeding and caring for the animals.

* * *

ACTIVITY: Meet my pet

RESOURCES: Visiting animals

PROCEDURE: Allow children and resource people to bring in animals for visits.

* * *

ACTIVITY: Learn about animals

RESOURCES: Trips

PROCEDURE: Visit farms, zoos, pet stores, etc. to see and observe animals.

* * *

ACTIVITY: What's my name?

MATERIALS: Games, Animal Lotto (commercial and homemade), zoo, farm

PROCEDURE: Children match pictures of the animals and are encouraged to use the animals' names.

* * *

ACTIVITY: What am I?

MATERIALS: Classification games (plant and animal), pictures of plants and animals

PROCEDURE: Children sort pictures according to category.

* * *

ACTIVITY: Animal characteristics

MATERIALS: Animal characterisitics (pictures of animals, fish birds)

PROCEDURE: Children sort pictures according to number of legs, tails, fins, wings, horns, etc.

* * *

ACTIVITY: Can you match us up?

MATERIALS: Match-up Game (pictures of mother and baby animals)

PROCEDURE: Children match mother animal to baby animals.

* * *

Plants

ACTIVITY: Let's learn about plants

MATERIALS: Provide a variety of plants in the classroom for children to help care for.

PROCEDURE: Become familiar with parts of plants: stem, leaf, flower, and root. Bring real plants to dissect.

* * *

ACTIVITY: Make new plants

MATERIALS: Plants such as philodeneron or coleus, water, glass container, soil, pots

PROCEDURE: Cuttings: Explain that some plants can root from cuttings. Choose a simple plant like coleus or philodendron. Break off shoots and put in glass jar. Encourage children to watch roots form. Plant cuttings when roots have developed.

* * *

ACTIVITY: What is a seed ?

MATERIALS: Fruits and vegetables

PROCEDURE: Cut fruits and vegetables to see seeds. Dry seeds. Plant.

* * *

ACTIVITY: Seeds are all sizes, shapes and colors

MATERIALS: Various seeds

PROCEDURE: Sort seeds.

* * *

ACTIVITY: How seeds grow

MATERIALS: Lima bean seeds, water, container, magnifying glass

PROCEDURE: Seeds: Soak lima bean seeds overnight. Slip the seed coat off the beans. Split them into two parts. Look for the tiny plants inside. Use magnifying glass to find where roots, stem, and leaves grow from this plant. Try other seeds. "Does every seed contain a leafy plant?"

* * *

ACTIVITY: What am I?

MATERIALS: Homemade Plant Classification Game (pictures of flowers, vegetables, trees)

PROCEDURE: Children classify pictures according to category.

* * *

ACTIVITY: Let's grow an avocado tree

MATERIALS: Avocado seed, container of water, toothpicks, sweet potato

PROCEDURE: Put toothpick into seed so that only 1/2 of the seed rests in the container of water. Roots, stems, and leaves will appear simultaneously. Start sweet potato in container of water. You will soon have an attractive vine.

* * *

ACTIVITY: Plant some bulbs

MATERIALS: Bulbs, trowel, containers

PROCEDURE: Bulbs: Grow plants from bulbs, e.g., tulips, daffodils, and hyacinths.

* * *

ACTIVITY: Watch me change colors

MATERIALS: Leafy stalk of celery or carnation, jar of colored red water

PROCEDURE: Cut off part of the celery stalk near bottom and put end into jar with colored water (red). Allow to stand overnight. The results are the thready portions of the stalk and the veins in the leaves become red. A carnation will be nice for a variation. It will work in the same manner.

* * *

ACTIVITY: From green to clear

MATERIALS: Alcohol in a jar, green leaf

PROCEDURE: Alcohol in a jar with a green leaf. Overnight the alcohol draws the chlorophyll from the leaf causing the leaf to turn clear and the alcohol to turn green.

* * *

ACTIVITY: Make a potato head

MATERIALS: Potatoes, spoons, thumbtacks, cotton balls, grass seed

PROCEDURE: Before children arrive, cut off end of each potato. Have spoons and thumbtacks ready for use. Have the children work along with you as you show them how to carve with a spoon. First, carve a broad grin or smile on the potato. Next, hollow out the head from the top. Then, have the children place the thumbtacks to represent the potato's face, eyes, and nose. Next, give a dish of well-moistened cotton balls to each child and place two or three of them in the hollowed head of the potato. Then sprinkle the moistened cotton with a pinch of grass seed. Place the potato heads on a window sill. In a few days the seeds will sprout. When the potato grows a nice head of "hair", send it home.

* * *

ACTIVITY: Bean sprouts

MATERIALS: Paper towels, clear plastic bags, bean seeds, containers of soil

PROCEDURE: Fold several paper towels accordion-style and place the bean seeds in the folds of the towels. Dampen the towels thoroughly and place them in clear plastic bags. Tie the bags closed and tape them to the window. In a few days the seeds will sprout if the towels are kept moist. Point out to the children how each seed sends out a little stem and the beginning roots. New sprouts may be planted in containers of soil.

* * *

ACTIVITY: Garden plants

MATERIALS: Pinto, radish, mint, string bean, cherry tomato, and dill seeds; six containers with soil

PROCEDURE: Plant seeds on last day before a long vacation. Put seeds in six separate pots. Place the pots in a sunny area before leaving school. Tell the children that when they return to school from vacation, they will enjoy many green little surprises. The pinto beans are very hardy and grow well. They should be soaked overnight prior to planting. They will sprout in three or four days. The radish seeds take about five days to sprout. Mint seeds take about six days to sprout when seeded directly in the soil. This is an interesting plant that will be new to most of your children. String beans, another hardy plant, needs about eight days to sprout. Cherry tomatoes need about seven days to sprout. Hopefully, the children will be able to enjoy the fruit of the tomato plant. Dill seeds need a little longer to germinate and will need ten to twelve days to sprout.

* * *

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ACTIVITY: Potted plants

MATERIALS: Two potted plants

PROCEDURE: Water: "Do plants need water?" Put two potted plants in window. Water one daily, but do not water the other. Note daily changes in plants.

* * *

Ecology

ACTIVITY: Ecology walk

MATERIALS: Environment

PROCEDURE: Introduce ecology and discuss what it is. Discuss why it is of concern today.

Organize a clean-up contest involving whole school. See which room can collect the most junk. Display in hall.

Take an ecology walk, e.g., around school, neighborhood, on field trips. Discuss litter, what to do with it, and how to prevent it.

Stress importance of not being wasteful at home or school, e.g., water, paper, food.

Build respect for wildlife and nature.

* * *

ACTIVITY: Bird feeders

MATERIALS: Grapefruit, yarn, bread crumbs, peanut butter, bird seed, spoons

PROCEDURE: Make bird feeders out of grapefruit halves. Taste grapefruit. Scoop out remaining fruit. Punch three holes in rind and attach three pieces of heavy yarn in holes. Mix together bread crumbs, peanut butter, and bird seed. Fill grapefruit with mixture. Hang outside. Observe.

* * *

Senses

ACTIVITY: Sight

MATERIALS: Prism, color paddles, microscope, kaleidoscope, magnifying glass, variety of natural objects to examine

PROCEDURE: Children take turns experimenting with equipment.

* * *

ACTIVITY: Color mixing

MATERIALS: Eye droppers, food color, jars, water, control cards for mixing specific colors.

PROCEDURE: Children mix colors freely. They then can use cards to make specific colors.

* * *

ACTIVITY: Touching

MATERIALS: Inside and outside environment

PROCEDURE: Children are allowed to freely touch and feel their environment.

* * *

ACTIVITY: Touching

MATERIALS: Circles of varying textures

PROCEDURE: Blindfold child; child matches textures.

* * *

ACTIVITY: Touching

MATERIALS: Sandpaper boards

PROCEDURE: Children feel different grades of sandpaper. Discuss rough, roughest, etc.

* * *

ACTIVITY: Touching

MATERIALS: Brown sugar, white sugar, powdered sugar, and sand in separate baby food jars

PROCEDURE: Ahead of time, prepare jars. Have four blindfolded volunteers face the class side by side. Offer the first child a touch of the contents of the first jar. Ask for a description and then identify it. Continue with the second child using the second jar. Discuss the outcome of the attempts to identify very similar items through the sense of touch.

* * *

ACTIVITY: Hearing

MATERIALS: DLM Familiar Sounds

PROCEDURE: Children listen to tape and match sounds to a picture.

* * *

ACTIVITY: Hearing

MATERIALS: Sound cylinders (cans filled with beans, rice, sugar, etc.) there should be two of each for matching

PROCEDURE: Children shake cylinders and match sounds.

* * *

ACTIVITY: Smelling

MATERIALS: Smell table--fresh flowers, perfume, mint, fresh vegetables, etc.

PROCEDURE: Objects are attractively arranged on a table for children to smell.

* * *

ACTIVITY: Smelling

MATERIALS: Six baby food jars, chopped onion, crushed cough drops, dab of toothpaste, small cut of cheese, dab of catsup, dab of mustard

PROCEDURE: Place each of the edible items listed above into separate baby food jars with closed lids. Have one child volunteer to attempt to identify the contents of the six jars by smelling them. Let the volunteer see and smell each of the jars before being blindfolded. Next, blindfold the child and choosing the jars randomly, let the child "sniff" each jar and try to identify the odors.

* * *

ACTIVITY: Tasting

MATERIALS: Diced raw potato, raw apple, chilled cheese, chilled orange, and chilled grapefruit into five separate baby food jars

PROCEDURE: Prepare food into jars before the activity begins. Then select five volunteers to participate in the taste test. Place the five children side by side facing the class and blindfold them. Then with your supervision, have each child take a different cube of food from the five jars. Before each child taste the food, have him/her tell what he/she thinks it is. Repeat the activity, but hold the child's nose.

* * *

ENERGY

ACTIVITY: Boats

MATERIALS: Wind; boats (plastic boats or boats you have made), styrofoam squares, toothpicks, tape, paper triangles for sails, a water table or a large flat container of water; bubbles; kites; pinwheels; balloons; windmill; Tinkertoys

PROCEDURE: Assemble a sailboat by taping a paper sail to a toothpick and inserting the toothpick into styrofoam. Float boats on water and children may blow on sail to make boat move or use outside on a windy day

Build Tinkertoy windmills to blow on or direct a fan on.

* * *

ACTIVITY: Movement of children

MATERIALS: Records (suitable for creative movement); scarves, hoops, streamers, yarn for props

PROCEDURE: Children move as music may suggest or make child feel. Direct children's attention to the idea, "When we move, we use energy. We use more energy when we move fast and less energy when we sit still."

* * *

ACTIVITY: Making things move

MATERIALS: Lightweight small bat, rubber ball, large cone, old bowling pins, large firm ball, butterchurn, whipping cream

PROCEDURE: Hit ball off tee. "You made the ball move by moving the bat." Have children turn butterchurn. "Turning the churn requires energy."

* * *

ACTIVITY: Solar cooking

MATERIALS: Solar cooker made from umbrella or box lined with aluminum foil

PROCEDURE: Make cooker; take outdoors and let food cook.

* * *

SEASONAL SUGGESTIONS FOR SCIENCE EXPERIENCES

AUTUMN

- Harvest time
- Food
  - eating for life
  - storing for winter (people and animals)
  - cooking and preparing
- Seeds
- Animals preparing for winter
  - birds leaving
  - nests
  - changes in fur
  - caterpillars
- Changes in plants and animals
- Caring for plants for winter
- Falling leaves
- Weather
  - cooler days
  - effect on clothing we wear
  - frost

* * *

WINTER

- Weather
  - cold
  - melting and freezing
  - ice, snow, sleet, fog
  - clothing necessary
- Animals
  - resting and shelter
  - pets that need care
  - bird feeding
- Light and color
  - bubbles
  - prisms
  - flashlights
  - lenses
- Electricity (for heat and light)
  - clinging elements of static electricity
- Plants
  - need for warmth and light
  - freezing or resting outside
  - winter bulbs--flowers
- Heat and light
  - short days--darkness
  - awareness of moon and stars
  - warmth of sun on some days
  - how buildings are heated
  - drying and evaporation

* * *

SPRING

- Weather
  - rain, fog, hail, wind
  - lightning, thunder
  - thawing
  - warm sun
  - effect on clothing we wear
- Smells
  - damp things
  - flowers
- Machines and how used
  - men working after the winter
  - construction (streets, buildings)
  - tree trimming, spraying
  - tools used on lawns, gardens, fields
  - understanding weights and balance--aids to moving things
- Animals
  - baby animals
  - growth
  - homes
  - feeding and care
- Plants
  - planting
  - growth
  - changes in trees, plants
  - flowers, buds
- Water, sand, and mud
  - evaporation
  - flow and forces of water
  - absorption
  - mixing, dissolving, combining

* * *

SUMMER

(If school does not continue into summer, some of these may be included in late spring and early autumn).

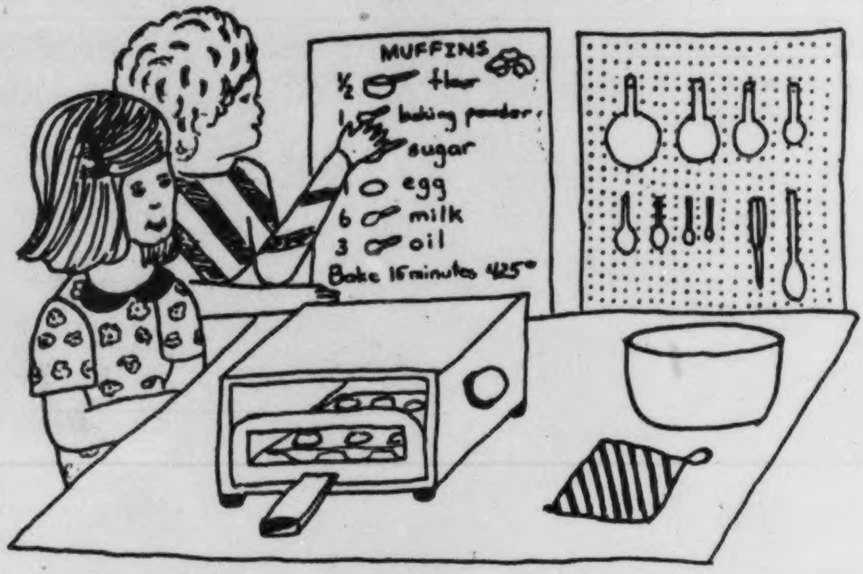
- Weather
  - hot sun, shade, and breezes
  - heat, rain, thunder, hail
  - effect on body
    - light clothing
    - resting
    - need for water
    - perspiration
- Animals
  - providing food, water, shade
  - discovery of worms, insects, spiders, and how they live
  - growth of baby animals born in spring

SCIENCE

Plants
  growth
  need for sun, water, some shade
  development and ripening of foods
  preparing fresh fruits and vegetables

Machines
  observing heavy machinery
  construction
  concepts of levers, wheels, pulleys
  continued use of sand, mud, water

Cooking



Creating the Center

The cooking center may be located in any corner of the room. It can be an extension of the math, science, or reading center.

Basic equipment for the center consists of a coded pegboard, measuring cups and spoons, and pot holders. Color coded outlines of the measuring cups, measuring spoons and pot holders are mounted on the pegboard by using colored contact paper. The measuring utensils are seriated on the board from large to small.

Small appliances are utilized for cooking in the classroom. These may be purchased for a program or brought from home as needed. A hot plate, toaster oven,popcorn popper, electric skillet, portable mixer, griddle, toaster, waffle iron and blender are useful for cooking experiences. A table and shelf are needed for workspace and storage.

Procedure

Tasting: The initial cooking experience involves sampling different foods. This activity can be broadened to include the sense of taste, as well as sight, touch, and smell. Raw fruits and vegetables (pineapple, orange, celery, cucumber, etc.) are appropriate for "tasting parties". The food to be sampled can be displayed in the science center. Children are encouraged to look at the food, touch it, and smell it. The teacher encourages discussion before and after cutting the food.

After the food is divided, each child has a taste and discussion follows. A count may be taken to determine if the majority of the children liked or disliked the food. (Results are recorded on a tasting chart composed of a teacher-made picture of the food with a corresponding happy or sad face indicating whether the children liked or disliked the food.)

A "tasting graph" may be used as an extension of "tasting parties". The teacher places several different foods in individual dishes on the science table. A graph is created on a piece of tag board. The chart is divided into columns with a picture of each food at the top of each column. During interest center time the children taste the different foods, decide which food they like best and paste a strip of paper in the appropriate column. During group time the teacher may initiate discussion concerning the graph. (What food did most children like? How many children liked the cheese, etc.?)

Cooking

Actual cooking experiences follow the initial "tasting parties". Activities are paced from simple to complex. Making popcorn, jello, rainbow bananas, and peanut butter balls are good beginning experiences. More complex activities would include applesauce, stone soup, M & M cookies, and muffins. Cooking experiences can also be planned to correspond with holidays.

Rebus Recipes

Teacher-made rebus or picture recipes give step by step instructions for the children to follow when cooking. The recipes are on large pieces of oak tag. Pictures and printing are neat and colorful, making the recipe attractive to the children. The needed utensils are color coded so the children can choose the appropriate one from the pegboard. The children are able to cook with the help of the recipe and a certain amount of teacher guidance. Recipes may be compiled in a class "cookbook". A colorful cover is created and the recipes are attached with individual notebook rings. The "cookbook" is displayed in the cooking center.

The day of a cooking experience, the teacher displays the recipe, the necessary ingredients, and the equipment on the cooking table. During interest center time a manageable number of children go to the cooking table to do part of the recipe. This may include adding the eggs, stirring the batter, etc. While the children are cooking, the teacher introduces new vocabulary such as bake, fry, measure, cool, warm. The children move to different interest centers when they are finished. The teacher sees that everyone who cares for a turn is able to have one. The cooking experience is completed during interest center time. The food is divided and eaten. The food may be shared at a snack time or immediately following preparation.

Cooking may be used to encourage good eating habits. For example, the cooking table may be set for breakfast with placemats, a centerpiece, decorative paper plates and cups. Waffles, pancakes, cold or hot cereal, English muffins, or cinnamon toast may be prepared and eaten by the children in small groups during interest center time.

Clean-up

Children are responsible for cleaning up after a cooking experience and enjoy being able to use dishes and utensils. If a sink is not accessible, two plastic tubs may be set up on the cooking table. One tub contains clear rinse water. A dish rack and drying towel are placed next to the tubs. Children may do the dishes during interest center time.

Volunteers

The cooking center lends itself to parent involvement. Parent volunteers may provide the necessary guidance for cooking experiences, or they may contribute actual ingredients for a cooking project.

Evaluation*

Children's Role

What did the children say that they have learned?
How did the children feel about the experience?
What would they change or add?

Adult's Role

What did you learn about the children's interest, experiences, language skills, thinking skills, academic skills, social skills, concepts, motivation?
How can an experience be modified: change of recipe, addition or subtraction of ingredients, change of utensils?

Helpful Cooking Hints

1. Children with food allergies should be identified. Post a list of the names of children who are allergic with the foods they cannot eat. Some of the more common foods to which children are allergic are milk and milk products, juices with high acid content (orange and grapefruit), chocolate, eggs, and nuts.

2. Be very cautious when serving or preparing foods which might cause choking, especially nuts, raw carrots, celery, and popcorn.

*Kelley, Lynn. Classroom Cooking. Arizona Board of Regents, copyright 1975. Used with permission of publisher. All rights reserved.

Children should always sit down to eat.

3. Limit the number of children to avoid crowding and to allow for adequate participation by each child.

4. Use low tables and chairs.

5. Do not let children stand on chairs to reach the stove. Adults should do the cooking over the burners. Turn pot handles away from the edge of the stove. Whenever possible, use electric fry pans or pots on a table at the child's level so he/she can help with the cooking, reminding him/her that these utensils are hot.

6. Have only the necessary tools, utensils and ingredients at the work table. All other materials should be removed as soon as they are no longer needed. Be sure there are enough tools and utensils for the children and that they are unbreakable.

7. Use blunt knives or serrated plastic knives for cutting cooked eggs, potatoes, bananas, etc. Use vegetable peelers only after demonstrating and supervising carefully.

8. Pre-plan the steps of the cooking project, and discuss plans with the children before beginning. They should be clear about what they are expected to do and what the adults will do before the cooking materials are made available to them.

9. As each small group of children are gathered, they should be dismissed to wash their hands before beginning the cooking activity.

10. Allow plenty of time for discussion, looking at, touching, tasting, comparing. Use every step in the cooking activity as an opportunity for the children to expand their learning.

Cooking as related to other subject areas

A. Math
   1. Seriation of size
   2. Quantities
   3. Numbers
   4. One-to-one correspondence
   5. Fractions - whole and half

B. Language
   1. Vocabulary - bake, fry, cool, warm, etc.
   2. Left - right and top to bottom progression
   3. Associating words with an activity
      color - word discrimination (whipping vs. beating)

C. Social Development
   1. Cooking something for every child in the class
   2. Sharing "extras" with the office
   3. Inviting another room to share what you have cooked

D. Art
  1. Decorating cookies, cupcakes, etc.
  2. Combining ingredients for color and shape.

E. Reading Readiness
  1. Left to right
  2. Written words
  3. Relationships (putting picture word to word objects)

F. Social Studies
  1. Where food came from
  2. How it's transported
  3. Locations
  4. Culture of people from other countries

G. Safety
  1. Handling of equipment
  2. Can opening
  3. Glass jars
  4. Turning handles
  5. Use of wooden spoons (they do not conduct heat)
  6. Use of sharp objects

H. Science
  1. Textures
  2. Senses - taste, smell, touch, see, hear
  3. Forms of matter - liquid, gas, solid
  4. Comparison

Resources

Some available cooking resources are:

Adventures of Cooking, compiled by Florence P. Foster
Mother-Child Cookbook, by Nancy Ferreira
Nutrition Education For Children, available through Kaye Sears, Nutrition Education Consultant, Maternal and Child Health Division, Oklahoma State Department of Health
More then Graham Crackers, by Nancy Wanamaker
The Grandmother Conspiracy Exposed, Nutrition for the Growing Child, by Lewis A. Coffin, CA: Capra Press, 1974.
Good Times with Good Foods, Learning Institute of North Carolina, 1976.
Come and Get It, a Natural Foods Cookbook for Children, by Kathleen M. Baxter, Ann Arbor, Mich.: Children First Press, 1978.

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Classroom Recipes

No Bake	Supplies Needed	Procedure
Fruit Kabobs	Toothpicks, assorted fruit chunks	String fruit onto toothpicks.
Smoothies	2 cups fresh strawberries, 2 cups milk, 2 bananas, 2 T or less honey	Blend all together until smooth.
Banana Sandwich	bananas, peanut butter	Spread 1 piece with peanut butter and top with other banana piece.
Honey Nutters	1 cup honey, 1 cup peanut butter, 1½ tsp. wheat germ, 1½ cup powdered milk	Mix all ingredients well. Roll into small balls. Roll in ground nuts or seeds if desired. Chill.
Cooked (broiler oven, electric skiller, crock pot)		
Nachos	Package of Doritos, cheese	Place Doritos on cookie sheet. Grate cheese. Sprinkle on top of Doritos. Place in a hot oven until cheese melts.
French Toast	2 eggs, ½cup milk, ½ tsp. vanilla, pinch of nutmeg, butter, 6 slices whole wheat bread (can be stale). Slice into quarters for small children.	In a mixing bowl, beat eggs with a beater until foamy. Add milk, vanilla and nutmeg and beat again. Melt pat of butter in skillet. Dip slice of bread into egg mixture and cook over medium heat. Serve with syrup.

Experiences With Food

-an apple:

cut wedges
make caramel coated apples
make applesauce, apple pie, apple dumplings, baked apples
have apple cobbler for lunch that day
dunk for apples - water play
taste some apple cider
visit store to buy some apples to eat
visit orchard to see some apples growing
visit apple packing and storage houses or outdoor market
cut open apple and talk about seeds - how and where they sprout
plant the seeds
compare them with other seeds
talk about different colors, sizes, shapes, and tastes and varieties of apples

-a pumpkin:

make a jack-o-lantern
roast some seeds
plant some seeds
make pumpkin tarts (or serve pumpkin pie that day)
pumpkin cake
cook leaves - for green vegetable (an African food)
visit a store to buy a pumpkin
visit a farm or garden where they grow

-a carrot:

peel it (feed peels to the pet if there is one)
make circles
make sticks
cook it
glaze it (with butter and brown sugar)
put top in water (soil) to grow

-a coconut:

drill it
taste the liquid
crack it open with a hammer, taste the meat
compare the fresh meat with shredded coconut, use coconut in cereal cookies
taste commercially prepared
taste coconut candy
taste coconut cookies

-peanuts:

crack them and taste them raw
roast them
plant them (Spanish peanuts grown in Northern States)
make peanut butter (or buy from store)
make peanut butter sandwiches
put peanut butter in celery sticks

-milk:

drink it
put chocolate in it to make chocolate milk, heat it to make cocoa
put in cakes, cream soup
make (instant) pudding
make ice cream
make yogurt, buttermilk
make butter
make skim milk from whole milk, i.e., take off the cream
prepare skim milk from dry milk powder
try evaporated milk on cereal
taste cottage cheese

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Resources For Learning

TEACHING AIDS

"The preoperational learner must have objects available to reinforce cognitive processes, and these objects must involve physical manipulations related to the cognitive manipulations of the objects."*

As young learners become able to think about their thinking and perform cognitive operations on objects not being physically manipulated, they still need the support of concrete objects.

"As Piaget points out, knowledge is not drawn from the object; it is acquired from actions effected upon objects."**

Because the publication committee subscribes to the previously stated premises, we strongly endorse the incorporation and utilization of concrete objects and experiences within early childhood (N-2) learning environments.

The following list of instructional machines, manipulatives, and games has been compiled for N-2 learners. It is suggested that catalog descriptions be consulted before purchases are made.

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*William B. Ragan and Gene D. Shepherd, Modern Elementary Curriculum, 6th ed. New York: Holt Rinehart and Winston, 1977. p. 77. Used with permission of publisher. All rights reserved.

**Shepherd, p. 85.

TEACHING AIDS

A

ABC Alphabet Game

Absubmuldi Checkers

Add-A-Count Scales

Alphablocks

Alpine Run

American Bricks

Amusement Park Game

Animals (toy fame, zoo, etc.)

Animal Families Memory Game

Ant Farm

Arch Builders

B

Backgammon

Balance Beams, Boards, Squares, Disks

Balance Scales

Balla-Rolla

Balls (foam, nerf, yarn, utility, etc.)

Barny Bullfrog Game

Barrel of Monkeys

Beads (wooden, sequential, colored, plastic, etc.)

Bean Bags

B (cont'd)

Berries-to-Market Game

Bike Route Game

Bingo Games

Blockbuster Set

Blockhead Game

Blockout Game

Body Movement Floor Game

Bo Jo-The Light-Up Sequences

Bolt n' Play

Bolt Tight

Booby Trap Game

Bowling Games

Brainster Game

Bristle Bears

Bristle Blocks

Broad Jump Mat

Broad Stair

Building Blocks

Building Squares

Button n' Boards

Buttons 'n Laces

Buy A Baboon Game

Buzzer Board/Pattern or Task Cards

C

Calculators

Can You Imagine?

Candy Land Game

Centimeter Cubes/Pattern or Task Cards

Chain Builder

Chain Links

Chalk/Chalkboards, Erasers

Charlie

Checkers

Chess

Chinese Checkers

Chip Trading Activities and Games

Chutes and Ladders Game

Classification Game

Classification Sorting Box

Clay

Clocks

Clown Bean Bag Game Board

Clue Game

Coin Stamps

Color and Shape Memory Game

Color Train Game

Colorama Game

C (cont'd)

Colored Cubes/Pattern or Task Cards

Colored Playskool Woodblocks

Combination Game

Comparison Balance

Complete-the-Pattern Set

Concept Cylinders

Concept Town

Connect Four Game

Connecting Crescents

Consonant Race Game

Construction Cubes

Cootie Game

Count Your Change Game

Counters

Counting Frames

Cross the Brook Game

Crossword Cube Game

Crystal Climbers

Crystal Pegs and Boards

Cubes (colored, wooden, inch, centimeter, etc.)

Cubic Design

Cubical Counting Blocks/Patterns or Task Cards

Cuisenaire Rods/Pattern or Task Cards

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C (cont'd)

Curious George Game

Cylinder Blocks

Cylinders, Knobless

D

D-Stix

Daredevils Speedway Game

Dataman

Design Blocks/Pattern or Task Cards

Design Cubes/Pattern or Task Cards

Developmental Storybooks

Dice/Dice Games

Dig-it Game

Digitor

Dominoes (animal, color, design, number, picture, shape, word, etc.)

Drill Instructor

Duorama

Dyna-Balance Rocking Platform

Dyna-Balance Walking Board

E

ETA Construction Set

Edu-Carpet

E (cont'd)

Educube Building Blocks

Edutron

Egg-citement

Einstein

Erector Sets

Etch-a-Sketch

F

Fantasy Builder

Farm (Playskool)

500 Game

Fit-s-Slot Builder

Flexy Blocks

Flip Books

Forasco Rods and Rosettes

Flowers and Butterflies Game

Footsteps to Numbers

Forest Friends Game

Fraction Bars/Pattern or Task Cards

Froggle

Fronts and Backs Game

Fun with Rhymes Game

G

Gears

Genius Game

Geoboards/Pattern or Task Cards

Georello Gears

Geo-ring Polyhedra

Georules

Gingerbread Man Game

Girders

Go Fish Games

Goldilocks and the Three Bears Game

Got a Minute Game

Gram-Lok Cubes

Gribbit Game

Groovy Letters and Numerals

Groovy Reels and Wheels

H

Hainstock Blocks

Hans Around the Clock Game

Heart Parquetry Blocks

Hexagon Game

Hi-Ho Cherry-O Game

Hippity Hopscotch Game

Honeybee Tree Game

Hoops (hula, etc.)

H (cont'd)

Hop a Hundred Game

Hopscotch (indoor) Game Mat

I

Incline Planes

Interlockers

Invicta Math Balance

J

Jack Straws Game

Jacks

Jewels

Jr. Wordage Game

K

Kaleidoscopes

Kawada

Key Math Attribute Blocks/Pattern or Task Cards

Key Math Cubes/Pattern or Task Cards

Kittie in the Keg

Knobbed Puzzles

Konnecto (giant, regular, mini-, pattern blocks)

Kugeli Builders

L

Lacing Activities, Cards, Cubes, Shoes, etc.)

L (cont'd)

Ladybug Game
Lakeshore Huskylight Block Set
Lazy Construction Set
Lauri Teaching Tiles
Learning When to Capitalize Game
Lego Sets
Letter, Capital and Lower Case (felt, foam, metal, plastic, sandpaper, wooden, etc.)
Light n' Learn
Lincoln Logs
Linking Letters
Links
Listen and Jump Game
Lite Brite
Little Professor
Lock Block Sets
Lock-A-Blocks
Lock-A-Wheels
Lock n' Stack Blocks
Lockboards
Locking Numerals
Look n' Do Cards
Looms/Loops, etc.
Loony Links

L (cont'd)

Lots-A-Links
Lotto Games

M

Magic Squares
Magical Silent E. Game
Magnetic Board/Magnetic numerals, colored objects, shapes, letters, etc.
Magnets
Magnifiers
Main Idea, Level A or Level B Game
Mancala
Mandinka
Marble Railway Game
Match Me Cards
Match Pegs
Measurement Instruments (standard, metric, weight, volume, linear, etc.)
Mechanical Skills Exploration Kit
Megabric
Memory Game
Metricubes/Pattern or Task Cards
Microscopes
Miras

M (cont'd)

Mirror Cards

Mirrors

Mr. Challenger

Mr. Mightywind

Module Building Blocks

Money

Money Game

Monopoly

Mosaic Sets/Frames, Pattern or Task Cards

Multi-base Blocks

Multi-Fit Builder

Multi-link Cubes/Pattern or Task Cards

Multivariant Sequencing Beads/Pattern or Task Cards

Mc

N

Nerf Balls, Shapes, etc.

Net Results Game

Number-Blox Blocks

Number Equalizer Balance

Numberland Counting Game

Numbers Up Game

Numerals (foam, plastic, wooden, sandpaper, metal, felt, etc.)

N (cont'd)

Numerite

Nursery Blocks

Nuts and Bolts

Nuts n' Bolts Builder

O

Occupation Photographs

Octons

Old Maid Game

One Hundred Chart Activities

Orthello Game

P

Parcheesi Game

Parquetry Blocks/Pattern or Task Cards

Pattern Blocks/Pattern or Task Cards

Pay the Cashier Game

Pegboards/Pegs/Pattern or Task Cards

Peg-It-Numerals

Pente Game

Perfection Game

Perma Blocks

Phonographs/Records

Photo Library (DLM)

Photographs

P (cont'd)

Pickup Sticks
Pipe Builders
Pipe Cleaners
Pipe Plumbing Set
Pitch and Learn
Place Value Boards/Flips
Planet Pits Game
Plateau Blocks (ETA)
Platform Scales
Play Panels
Playskool Village
Playtiles/Pattern or Task Cards
Poki Blocks
Pop-n-Groove Builder
Pre-Writing Design Cards
Press Ups
Pronoun Pinch-Hitter Game
Pulleys
Puppets
Put and Take
Puzlasco Game
Puzzles

Q

Quad-ominoes

Q (cont'd)

Queen of Hearts Game
Quiz Kid
Quizmo Games
Quoits Ring Toss Game

R

Raggedy Ann Game
Rainbow Building Blocks
Reading for Detail Game
Red Light/Green Light Game
Reels n' Wheels
Rhyming Cards
Rhyming Zig Zag Game
Rhythmn Instruments
Rig-a Jig
Roll 'n Write
Rolling Games (dice, cubes, etc.)
Ron the Python Game
Royal Advance Game

S

Sacks and Wrappers Game
Same or Different Cards
Sand/Sand Table, Tools, etc.
Scooter Board
Score Four Game

S (cont'd)

Scrabble for Juniors Game

Screws

Sea of Vowels Game

See-Thru Wood Blocks

Sentence Cube Game

Sequencing Beads/Pattern or Task Cards

Sequencing Cards, Photos, etc.

Sequential Memory Training Set

Sequential Sorting Box

Seriation Manipulatives (stacking, nesting)

Sets and Numbers Game

Sewing Activities, Cards, etc.

Shape and Color Floor Game

Shape Stack

Shape Stamps

Shapes (felt, foam, plastic, metal, wooden, sandpaper, etc.)

Shapes and Numerals Game

Shoot for a Goal Game

Sight Word Snap Games I & II

Silly Sounds Game

Simon

Simple Machines

Skill Sticks

S (cont'd)

Slot-a-Round Manipulative System

Smarty Farm Game

Snap-n-Links Builder

Snap 'n Play

Snap Beads

Snap Cubes

Snap Wall

Sneaky Snake Game

Soft Blocks

Soma Cubes/Pattern or Task Cards

Sonos

Sorry Game

Sort and Sound Word-Making Game

Sorting Boxes, Trays, etc.

Space Flight Game

Space Hop Game

Space Probe Game

Space Wheels

Speak and Math

Speak and Read

Speak and Spell

Spell It Game

Spello

S (cont'd)

Spider Crawl Game

Spill and Spell

Spill the Beans

Spin a Shape Game

Spin and Touch Bear Shape Sorter

Spinners

Sprocketeer

Star Builder

Start Your Engine Game

Steeplechase Game

Stencils

Stepping Stone Walk Ons (numerals, shapes, letters, etc.)

Stern Blocks/Pattern or Task Cards

Stethoscope

Stick on Target Ball Games

Stringing Activities/Pattern or Task Cards (beads, etc.)

Struts

Subtraction Express Game

Super Structures

Superblocks

Superstition Game

Syllable Safari Game

S (cont'd)

Syllable Scoreboard Game

T

Tac Tracks Game

Tactile Bridges

Tactile Materials (shapes, numerals, letters, etc.)

Tag Motor System Letters/Numerals

Tangrams/Pattern or Task Cards

Tape Recorder/Tapes

Teambuilders Addition Game

Teddy Bear Shape Sorter

Telephones (push button, dial, etc.)

Telephone Game

Templates

Tengo Game

Tens Game

Tessellation Activities

Thermometers

Threading Block

Threading Manipulates (beads, buttons, spools, etc.)

Threading Sequences

Three Little Pigs Game

Tic Tac Toad Game

T (cont'd)

Tic Tac Total Game

Tickle Bee Game

Tiddledy Winks Game

Timerloc Building Set

Time Stamps

Tinkertoys (various size sets available)

Toadstool Match Activity

Tortoise-Hare Game

Toss Across Game

Toss and Total Game

Tots Toolery

Touch Boards

Tower-ifics

Toy Builder

Tracing Stencils

Tree Sorts

Tri-Ominos

Trouble Game

Trundle Wheels

Tuf Game

Turn-a-Gear

Tutorgram

Twins Game

Twister Game

T (cont'd)

Typewriter

U

Uncle Wiggely Game

Undersea World Game

Unifix Cubes/Grids/Pattern or Task Cards

Unit Building Blocks

Utility Balls

V

Versa-Tile Materials, Games, Puzzles, etc.)

Viewmaster, Reels

Village (Playskool)

W

Water Activities/Table, Tools, etc.

Weather Forecasting Kit

Wedges

What Comes Next?

What's My Number?

Whatchamacallit Game

Wheels and Axles

Wheel Beads

White Water Raft Trip Game

Winnie the Pooh Game

Wipe-off Cards/Crayons or

W (cont'd)

Viz-a-Vis marking pens

Wizard of Oz Game

Wood Scraps

Wooden Cubes

Word Trek Game

Worm Tree Game/Task Cards

X

Y

Yarn Balls

Z

The following list of children's books is a sampling of literature to be read to students or by students. The Newbury Medal, Caldecott Medal, and Sequoyah Award Books are also recommended. Lists may be obtained at local public libraries.

SUGGESTED BOOKS FOR CHILDREN

N = Nursery
K = Kindergarten
P = Primary (1st and 2nd grades)

1. N K Aardema, Verna. *Who's in Rabbit's House?* New York: The Dial Press, 1977.
2. N K P Abisch, Roz. *Do You Know What Time It Is?* Englewood Cliffs, NJ, 1968.
3. N K P Allington, Richard L. *Colors*. Milwaukee, WI: Raintree Publications, 1962.
4. N K P Anders, Rebecca. *Making Musical Instruments*. Minneapolis, MN: Lerner Publications Co., 1975.
5. N K P Anderson, L. W. *Light & Color*. Milwaukee, WI: Raintree Children's Books, 1978.
6. N K P Anglund, Joan Walsh. *A Friend Is Someone Who Likes You*. New York: Harcourt, Brace & World, Inc., 1958
7. N K P Baker, Eugene. *I Want To Be A Weatherman*. Chicago, IL: Children's Press, 1972.
8. N K Balian, Lorna. *Humbug Rabbitt*. Nashville, TN: Abingden Press, 1974.
9. N K Banner, Angela. *Ant & Bee & The Rainbow*. New York: Watts, Franklin, Inc., Subs of Grolier Inc., 1963.
10. N K P Bannon, Laura. *Red Mittens*. Boston, MA: Houghton Mifflin Co., 1946.
11. N K P Barrett, Judith. *Cloudy With A Chance Of Meatballs*. New York: Anthenem Publishing Co., 1978.
12. N K P Barrett, Peter & Barrett, Susan. *The Circle Sarah Drew*. New York: Scroll Press, Inc., 1973.
13. N K P Bate, Lucy. *Little Rabbit's Loose Tooth*. New York: Scholastic Book Services, 1975.

14. N K P Becker, John. Seven Little Rabbits. New York: Walker and Company, 1973.

15. N K P Beim, Jerrold. The Smallest Boy In The Class. New York: William Morrow & Co., Inc., 1949.

16. K P Bemelmans, Ludwig. Madeline. New York: Viking, 1939.

17. N K P Berger, Terry. Being Alone, Being Together. Milwaukee, WI: Raintree Publishing, 1974.

18. N K P Bloome, Enid. Dogs Don't Belong on Beds. Garden City, NY: Doubleday & Company, 1971

19. Blume, Judy. Tales of A Fourth Grade Nothing. New York: E. P. Dutton, 1972.

20. N K Buckley, Helen. The Little Boy and The Birthday. New York: Lothrop, 1965.

21. N K P Bulla, Blyde. What Makes A Shadow? New York: Scholastic, 1971.

22. N K Burningham, John. Mr. Gumpy's Motor Car. New York: Thomas Y. Crowell Co., 1978.

23. N K P Burstein, John. Slim Goodbody: What Can Go Wrong & How To Be Strong. New York: McGraw-Hill Book Co., 1980.

24. K P Burton, Virginia Lee. Mike Mulligan and His Steam Shovel. Boston, MA: Houghton-Mifflin, 1939.

25. N K Carle, Eric. The Mixed-Up Chameleon. New York: Thomas Y. Crowell Co., 1975.

26. N K Carle, Eric. The Hungry Caterpillar. New York: Thomas Y. Crowell Co., 1975.

27. N K Carrick, Donald. The Tree. New York: Macmillan Publishing Co., 1971.

28. N K P Cartwright, Sally. What's In A Map? New York: Coward, McCann, & Geoghegan, Inc., 1976.

29. N K P Chapin, Cynthia. What Will the Weather Be? Chicago, IL: Albert Whitman & Co., 1965.

30. N K P Charles, Donald. Calico Cat Looks Around. Chicago, IL: Children's Press, 1975.

31. N K Clure, Beth and Rumsey, Helen. Manipulative Series. Los Angeles, CA: Bowmar, 1968.

32. N K Charlip, Remy. Mother, Mother I Feel Sick. New York: Parents' Magazine Press, 1966.

33. N K Clifton, Lucille. Everett Anderson's Friend. New York: Holt, Rinehart & Winston, 1976.

34. N K P Cohen, Miriam. When Will I Read? New York: Greenwillow Books, 1977.

35. N K P Cole, Jeanna. A Chick Hatches. New York: William Morrow & Co., Inc., 1976.

36. N K P Colmey, Mary J. Red, Yellow & Blue. Minneapolis, MN: T. S. Denison & Co.

37. N K P Conaway, Judith. The Discovery Book of Up & Down. Milwaukee, WI: Raintree Publications, 1977.

38. N K Daughtery, James. Andy and The Lion. New York: Viking, 1938.

39. N K P D'Aulaire, Ingri & D'Aulaire, Edgar. Don't Count Your Chicks. Garden City, NY: Doubleday & Co., Inc., 1973.

40. N K P Delaney, A. The Butterfly. New York: Delacorte (c/o Dell Publishing Co.), 1977.

41. N K P Distler, Bette. Timothy Tuneful. New York: Macmillan Publishing Co.

42. N K P Duveisin, Roger. House of Four Seasons. New York: Lathrop, 1956.

43. N K P Eichenberg, Fritz. Dancing in The Moon: Counting Rhymes. New York: Harcourt, Brace Jovanovich, Inc., 1956.

44. N K Ets, Marie Hall. Gilberton and The Wind. New York: Viking, 1963.

45. N K P Fassler, Jean. Howie Helps Himself. Chicago, IL: Albert Whitman & Co., 1975.

46. N K P Fisher, Margery M. One & One. N.Y.: T.Y. Crowell, 1963.

47. N K Flack, Marjorie. Ask Mr. Bear. N.Y.: Macmillan Co., 1958.

48. N K P Freedman, Jonathan. The Man Who'd Bounce the World. Philadephia, Penn.: Turtle Island Press, 1979.

49. K P Freeman, Don. Corduroy. N.Y., N.Y.: Viking Press, 1978.

50. N K P Friesel, Uwe. Tim, the Peacemaker. N.Y.: Scroll Press, 1972.

51. N K P Freman, Robert. Bigger & Smaller. N.Y.: T.Y. Crowwell, 1971.

52. K P Gackenbach, Dick. Harry and the Terrible Whatzit. N.Y., N.Y: Seabury Press, 1977.

53. N K Gag, Wands. Millions of Cats. N.Y.: Coward-McCann, 1928.

54. N K P Garelick, May. Where Does the Butterfly Go When it Rains? Reading, Mass.: Addison-Welsey, 1961.

55. K P Gelman, Riat Golden. Favorite Riddles, Knock-Knocks, and Nonsense. N.Y., N.Y.: Scholastic Book Services, 1980.

56. N K P Giff, Patricia R. The Girl Who Knew It All. N.Y.: Dell Publishing Co.

57. K P Ginsburg, Mirra. Mushroom in the Rain. N.Y., N.Y.: Collier Books, Division of Macmillan Publishing Co., Inc., 1974.

58. N K P Golderich, Gloria & Goldreich, Ester. What Can She Be? A Musician. N.Y.: Lothrop, Lee & Shepard Books, Division of William Morrow & Co., Inc., 1975.

59. N K P Gramatky, Hardie. Little Toot. N.Y.: Putnam, 1939.

60. N K Greenfield, Eloise. Africa Dream. N.Y.: John Day Co., 1977.

61. N K P Grender, Iris. Measuring Things. N.Y.: Pantheon, 1976.

62. N K Grifalconi, Ann. *City Rhythms*. Bobbs-Merrill Co., Inc., 1966.

63. N K P Gross, Ruth B. *Money, Money, Money*. New York: Scholastic, 1976.

64. N K Gruifoile, Elizabeth. *Have You Seen My Brother?* Chicago, IL: Follett, 1962.

65. N K P Harris, Susan. *Volcanoes*. New York: Watts, Franklin, Inc., Subs. of Grolier Inc., 1979.

66. N K P Hartelius, Margaret A. *The Chicken's Child*. New York: Scholastic, 1977.

67. N K P Haywood, Carolyn. *Here's A Penny*. New York: Harcourt Brace Jovanovich, Inc., 1965.

68. K P Hazen, Barbara Shook. *Animal Manners*. New York: Golden Press.

69. N K Hazen, Nancy. *Grownups Cry Too*. Chapel Hill, NC: Lollipop Power, Inc., 1973.

70. N K Heilbroner, John. *Robert The Rose Horse*. New York: Beginner Books, Random House, Inc., 1962.

71. N K P Hintz, Sandy & Hintz, Martin. *We Can't Afford It*. Milwaukee, WI: Raintree Publications, 1977.

72. N K P Hoban, Lillian. *Arthur's Prize Reader*. New York: Harper & Row, Publishers, 1978.

73. N K Hoban, Russell. *Baby Sister For Frances*. New York: Harper & Row, Publishers, 1964.

74. N K Hoban, Tana. *Circles, Triangles and Squares*. New York: Macmillan Co., 1974.

75. N K Hoff, Sid. *Henrietta Lays Some Eggs*. New Canaan, CT: Garrard Publishing Co., 1977.

76. K P Hogan, Carol. *Eighteen Cousins*. New York: Parent's Magazine Press.

77. N K P Howard, John. *I Can Read About Fossils*. Mahwah, NJ: Troll Associates, 1976.

78. N K P Hutchins, Carleen M. Who Will Drown The Sound? New York: Coward, McCann & Georghogan, Inc., 1972.

79. N K Hutchens, Pat. Rosie's Walk. New York: Macmillan Publishing Co., Inc., 1968.

80. N K P Isadora, Rachel. Ben's Trumpet. New York: Greenwillow Books, 1979.

81. N K Iwasaki, Chihiro. A New Baby Is Coming To My House. New York: McGraw-Hill, 1970.

82. N K Janosch. Dear Snowman. New York: World Publishing Co., 1969.

83. N K Kay, Helen. One Mitten Lewis. New York: Lothrop, 1955.

84. N K P Keats, Ezra Jack. A Letter to Amy. New York: Harper & Row, 1967.

85. N K P Kerr, James. Dandy, the Dime. Minneapolis, MN: T. S. Denison & Co.

86. N K P Knight, David. Let's Find Out About Sound. New York: Franklin Watts, Inc., 1975.

87. N K P Knight, Vick. The Night The Crayons Talked. Alhambra, CA: Borden Publishing Co., 1974.

88. K P Kraus, Robert. Lee The Late Bloomer. New York: E. P. Dutton, 1971.

89. N K P Kredenser, Gail. One Dancing Drum. New York: S. G. Phillips, Inc., 1971.

90. N K P Kruss, James. Three By Three. New York: Macmillan, 1965.

91. N K Laster, Joe. He's My Brother. Chicago, IL: Albert Whitman & Co., 1974.

92. K P Latham, Jean Lee. What Tabbit The Rabbit Found. Champaign, IL: Garrard Publishing Co., 1974.

93. P Lawson, Robert. Rabbit Hill. New York: Viking Press, 1944.

94. K P Le Sieg, Theo. Hooper Humperdink? Not Him. New York: Random House.

95. N K P Lionni, Leo. Frederick. New York: Pantheon Books, Division of Random House, 1967.

96. N K Litchfield, Ada. I Can, Can You? Steck-Vaughn Co., 1971.

97. K P Littledale, Harold. Alexander. New York: Parent's Magazine Press, 1964.

98. N K Lobel, Arnold. A Zoo For Mister Muster. New York: Harper & Row, 1962.

99. K P Lord, John Vernon. The Giant Jam Sandwich. Boston, MA: Houghton-Mifflin Co.

100. N K P Machado, Joan. Almost Just Alike. San Francisco, CA: Lesuring Communications Co., 1970.

101. N K P Mack, Stan. Runaway Road. New York: Parent's Magazine Press, 1980.

102. N K P Mari, Iela and Mari, Enze. Chicken and The Egg. New York: Pantheon Books, Division of Random House, 1970.

103. N K P Martin, Bill. Brown Bear, Brown Bear. London, NY: Holt, Rinehart, and Winston, 1970.

104. K P Mathews, Geda Bradley. What Was That? New York: Western Publishing Co., 1977.

105. N K P May, Julian. They Turned to Stone. New York: Holiday House, Inc., 1965.

106. N K Mayer, Mercer. If I Had. New York: The Dial Press, Inc., 1968.

107. N K McClosky, Robert. Blueberries for Sal. New York: Viking, 1948.

108. N K McDermott, Gerald. Aanasi the Spider. Puffin Book, 1972.

109. K P McInnes, John. The Ghost Said Boo. Champaign, IL: Garrard Publishing Co., 1974.

110. N K McGovern, Ann. Black is Beautiful. New York: Four Winds Press, 1969.

111. N K P McLeed, Emilie. *One Snail & Me*. Waltham, Mary: Little, Brown & Co., 1961.

112. N K P McPhail, David. *The Bear's Toothache*. N.Y., N.Y.: Penquin Books, 1972.

113. N K P Medaugh, Susan. *Too Short Fred*. Boston, Mass.: Houghton-Mifflin, 1978.

114. N I Minarik, Else H. *Little Bear*. Harper & Row, 1957.

115. N K P Miles, Miska. *Chicken Forgets*. N.Y.: Scholastic, 1977.

116. N K Mizumura, Dazue. *If I Were A Mother*. N.Y.: Thomas Y. Crowell Co.

117. N K P Moncure, Jane B. *What Causes It?* Elgin, Ill.: Child's World, Inc., 1977.

118. N K Morrison, Bill. *Squeeze a Sneeze*. Houghton-Mifflin Co., 1977.

119. K P Most, Bernard. *If the Dinosaurs Came Back*. N.Y., N.Y.: Harcourt Brace & Jovanovich, 1978.

120. K P National Geographic Society. *Books for Young Explorers Series*. 1972-74.

121. N K P Paeola, Tomic de. *The Popcorn Book*. N.Y.: Scholastic Book Services, 1978.

122. N K Parrish, Peggy. *Good Hunting Little Indian*. N.Y.: Scott Books.

123. N K Payne, Emmy. *Katy No Pocket*. Boston., Mass: Houghton-Mifflin Co., 1964.

124. N K Petersham, Maud and Miska. *Circus Baby*. N.Y.: Macmillan Co., 1950.

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127. N K Politi, Lee. *Rosa*. N.Y.: Schribner, 1960.

128. N K Petter, Beatrix. The Tale of Peter Rabbit. New York: Warne, 1903.

129. N K Poulet, Virginia. Blue Bug's Vegetable Garden. Children's Press, 1973.

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131. N K P Rinkoff, Barbara. Map is A Picture. New York: T. Y. Crowell, 1965.

132. N K P Rothman, Joel. A Moment In Time. New York: Scroll Press, 1973.

133. N K Schneer, Julian. Rain Makes Applesauce. New York: Holiday, 1964.

134. N K Schlein, Miriam. Heavy Is A Hippopotamus. New York: W. R. Scott, 1954.

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136. N K Scott, Ann Herbert. Sam. New York: McGraw-Hill Book Co., 1967.

137. N K Selsam, Millicent E. All Kinds of Babies. New York: Four Winds Press, 1969.

138. N K Sendak, Maurice. Alligators All Around. New York: Harper & Row, 1962.

139. N K P Shapp, Martha & Shapp, Charles. Let's Find Out About What's Light - What's Heavy. New York: Watts, Franklin, Inc., Subs. of Grolier, Inc., 1975.

140. K P Sharmat, Marjorie Weinman. I'm Terrific. New York: Holiday House, 1977.

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144. N K Sinberg, Janet. Divorce Is A Grown-Up Problem. New York: Avon, 1978.

145. N K Slobedkina, Esphry. Caps For Sale. New York: W. R. Scott, 1947.

146. K P Soule, Jean C. Never Tease A Weasel. New York: Parent's Magazine Press, 1964.

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148. N K Stevenson, James. Could Be Worse. New York: Greenwillow Books, 1977.

149. K P Stevenson, Robert Louis. A Child's Garden of Verses. New York: Random House, 1978.

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152. K P Tuder, Tasha. Five Senses. New York: Platt & Muck Publishing Co., 1978.

153. N K Udry, Janice M. Let's Be Enemies. Harper & Row, 1961.

154. N K P Vigna, Judith. The Little Boy Who Loved Dirt & Almost Became A Superslob. Chicago, IL: Albert Whitman & Co., 1975.

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156. K P Walt Disney Productions. Button Soup. New York: Random House, 1976.

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158. N K P Wildsmith, Brian. Brian Wildsmith's One, Two, Threes. New York: Franklin Watts, Inc., Subs. of Grolier, Inc., 1965.

159. N K P Weil, Lisl. Gertie and Gus. New York: Parent's Magazine Press, 1977.

160. P White, E. B. Charlotte,'s Web. New York: Harper & Row, 1952.

161. P Wilder, Laura Ingalls. *Little House in the Big Woods*. New York: Harper & Row, 1953.

162. N K P Winn, Marie. *Fisherman Who Needed A Knife: A Story About Why People Need Money*. New York: Simon & Schuster, Inc., 1970.

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165. K P Yolen, Jane. *Commander Toad in Space*. New York: Coward, McGann & Geoghehan, Inc., 1980.

166. K P Young, Miriam. *So What If It's Raining*. New York: Parent's Magazine Press, 1976.

167. N K P Ziegler, Sandra. *All of Grandmother's Clocks: A Beginning Book About Time*. Elgin, IL: Child's World, Inc., 1977.

168. N K P Zimelman, Nathan. *Michael Allen Found A Dime*. Minneapolis, MN: Carolrhoda Books, Inc., 1972.

169. N K P Zolotow, Charlotte. *William's Doll.* New York: Harper & Row, 1972.

ASSESSMENT TOOLS

Assessment tools are available to assist teachers in determining a child's individual developmental rate of growth. Data gained from assessing each child's developmental level can be used to diagnose a child's strength and limitations to plan a program to enhance his/her development. Information about tools available may be obtained from your Regional Service Center or the State Department of Education.

Cognitive Skills Assessment Battery (CSAB)	Pre-Kindergarten, Kindergarten	Body parts, colors, shapes, number, motor
Denver Development Screening Test (DDST)	2-6 years Screen	Gross and fine motor, personal, social
First Grade Screening Test (FGST)	5-7 years Screen	Knowledge, body image, memory, visual-motor coordination
Gates-MacGinitie Reading Test	Kindergarten-1 Readiness	Listening, auditory, visual-motor, visual discrimination, letter recognition, word recognition, following directions
Gesell Institute School Readiness Materials	5-10 years Readiness	Draw-A-Man, language, motor, social, quantity
Gesell Institute Pre-School Readiness	2½-6 years Readiness	Gross and fine motor, language, shapes, numbers
Kindergarten Keys Inventory	Kindergarten Readiness	Social, general concepts, memory, motor, problem solving
McCarthy Screening Test	4-6½ years Screen	Visual memory, leg coordination, draw-a-design, concepts, numerical memory

Metropolitan Readiness Test	End Kindergarten Early 1 Readiness	Word meaning, listening, matching, numbers and copying, auditory discrimination
Murphy-Durrell Reading Readiness Analysis	Kindergarten-1 Readiness	Letter names, phonemes, gross and fine motor
Parent Readiness Evaluation of Pre-Schoolers (PREP)	Pre-School Readiness	Determines performance level of child in relation to peers
Primary Self-Concept Inventory	Kindergarten-6 Screen	Personal, social, intellectual self concept
Riley Motor Problems Inventory	4-9 years Motor	Gross and fine motor skills (oral directions)
Sprigle School Readiness Screening Test (SSRST)	4½-6 years Screen	Verbal comprehension, vocabulary, numbers, reasoning, visual discrimination
VANE Kindergarten Screening Tool	4-5 years Screen	Vocabulary, perceptual motor, draw-a-man
Yellow Brick Road	5-6 years Screen	Motor, visual, auditory, language

THE TEACHER AS A PROFESSIONAL

Early childhood organizations provide an opportunity for professional growth, sharing of ideas and a support group for teachers of young children. State and local affiliates have conferences, send newsletters, and provide publications for professionals in early childhood education. Information on state activities can be obtained from the Early Childhood Specialist at the State Department of Education.

Professional Organizations Within the State

Oklahoma Association on Children Under Six - purpose of the organization is to work in behalf of children and provide opportunities for cooperation of groups and individuals concerned with the well-being of children. Oklahoma is among 14 southern states with regional membership in the Southern Association on Children Under Six. OACUS membership includes teachers, caregivers, college instructors, students, psychologists, licensing workers, child care consultants and directors of day care, pre-school and child development programs.

Friends of Day Care - a non-profit, community service organization formed to meet the needs of adults in the Tulsa area who teach and care for young children, so that children may have the best care and quality learning opportunities.

Head Start Directors Association - Head Start is a federally funded comprehensive child development program for pre-school children with an overall goal of developing social competence. Using a parent-teacher team approach, Head Start focuses on physical, intellectual, emotional and social development.

Oklahoma Association for the Education of Young Children - OAEYC is a state affiliate of the National Association for the Education of Young Children. Its purpose is to serve and act in behalf of the needs and rights of children, with primary focus on providing education, services and resources.

Oklahoma Kindergarten Teachers Association - OKTA'S objective is to encourage professional growth for teachers of young children. OKTA holds one annual meeting which coincides with the state OEA convention and mails three newsletters yearly.

Council for Exceptional Children - provides information on children with special problems.

Professional Organizations and Other Sources

*Association for Childhood Education International
3615 Wisconsin Avenue, N. W.
Washington, D. C. 20016

The Booklist
American Library Association
50 East Huron Street
Chicago, Illinois 60611

Child Study Association of America
9 East 89th Street
New York, New York 10028

Children's Television Workshop
National Educational Television
1865 Broadway
New York, New York 10023

*Council for Exceptional Children
1920 Association Drive
Reston, Virginia 20091

*Department of Elementary-Kindergarten-Nursery Education
National Education Association
1201 Sixteenth Street, N. W.
Washington, D. C. 20036

ERIC Clearinghouse on Early Childhood Education
University of Illinois
805 West Pennsylvania Avenue
Urbana, Illinois 61801
(Resource Center for research and articles on early childhood education)

*National Association for the Education of Young Children
1834 Connecticut Ave., N. W.
Washington, D. C. 20009

Office of Education
U.S. Department of Health, Education, and Welfare
Washington, D. C. 20202

*Southern Association of Children Under Six
Box 5403, Brady Station
Little Rock, Arkansas 72215

Society for Research in Child Development
University of Chicago Press
5750 Ellis Avenue
Chicago, Illinois 60637

Superintendent of Documents
U.S. Government Printing Office
Washington, D. C. 20402

*State affiliates

HOW TO USE AN AIDE OR PARAPROFESSIONAL

Aides or paraprofessionals may be utilized to assist the teacher and increase the effectiveness of the classroom. The aide should be trained co-operatively by the administrator and teacher, regarding the instructional needs of children, specific responsibilities, and policies and regulations relative to the operation of the school and professional ethics.

A job description is provided for the aide. The daily scheduled responsibilities are posted for referral when needed. Expectations are made clear and the techniques to be used with the children are established by the teacher.

1. Help with preparation and care of materials:
    Mix paint
    Sort crayons
    Cut paper for easel and art activities
    Prepare progress chart
    Assist with housekeeping

2. Assist children with coats and belongings at arrival and direct them to the group or work activity.

3. Assist with center time:
    Help children to understand directions
    Guide children in proper care of materials
    Read stories to small group or individual children
    Assist children with cleanup of materials
    Assist with cooking experiences
    Prepare snack

4. Function as another adult friend in the classroom:
    Talk with children
    Sit by a child who needs support
    Help children get ready to go home
    Take children to bus when appropriate

5. Help make visual aids:
    Print name cards
    Help make games and teaching materials
    Assist with attractive display of children's work and bulletin boards

6. Assist in record keeping:
    Assist with checking skills when requested
    Prepare attendance information for the office

Aides Who Cannot Handle the Situation

The aide or paraprofessional must have an understanding of young children. They become acquainted with the rules of the classroom and help maintain a positive, success-oriented climate for the children. If an aide cannot follow the procedures of the classroom and function effectively - the administrator is asked to observe and evaluate the situation. Sometimes a person is uncomfortable with one age group of children but can function well with another. Those who work with young children must respect and enjoy the characteristics of these energetic learners.

* EARLY CHILDHOOD PARAPROFESSIONAL/AIDE

JOB DESCRIPTION

1. Works under the guidance of the assigned teacher who is the immediate supervisor and trainer. The teacher determines curriculum, routine, schedules and policies for the room. The Paraprofessional/Aide is expected to assist the teacher in achieving the program objectives.

2. Helps to build an adult-child relationship that contributes to the development of strong self-concepts and a positive climate.

3. Helps to create and maintain a warm, orderly and attractive environment for children.

4. Interacts with the guides the children within the interest centers, outdoor play and motor room or gym activities.

5. Assists the teacher with the pacing of classroom activities which reflects the individual growth and development needs of the children.

6. Supports group time activities lead by the teacher and assumes the leadership responsibility when planned or needed.

7. Participates in the making of materials and development of curriculum to meet the children's educational needs.

8. Assists daily with the preparation of materials needed to implement the plans of the day.

9. Prepares for the snack or lunch routine as appropriate.

10. Accepts on-the-job suggestions and counseling from the teacher.

11. Grows in knowledge and skills through workshop and training opportunities.

* This job description has been adapted from the one in use at the Early Childhood Development Center, Lowell School, Tulsa Public Schools.

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    Reit, Seymour. The Magic of Everyday Things.
    Thoburn, Tina. Discovering Shapes.
    Thoburn, Tina. Learning About Sizes.

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  I Do, and I Understand
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EVALUATION

Please help by responding to the following:

1. Grade level taught ______________________________

2. What is most helpful about this curriculum guide? ____________

   ____

3. Is the format easily understood and the content usable?

   Yes ____________ No ____________

4. In what areas have you found the suggested activities most useful? ______________________________

   ____

   ____

5. Is there an area you would like to see added? ____________

   ____

6. What are some other kinds of early childhood publications which would be of use to you? ______________________________

   ____

   ____

In the following space, would you share a successful teaching idea?

Name ______________________________

School ______________________________

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Return to: Early Childhood Specialist, Oklahoma State Department
of Education, 2500 North Lincoln, Oklahoma City,
Oklahoma 73105

THE BUTTERFLY

I remember one morning when I discovered a cocoon in the back of a tree just as a butterfly was making a hole in its case and preparing to come out. I waited awhile, but it was too long appearing and I was impatient. I bent over it and breathed on it to warm it. I warmed it as quickly as I could and the miracle began to happen before my eyes, faster than life. The case opened; the butterfly started slowly crawling out, and I shall never forget my horror when I saw how its wings were folded back and crumpled; the wretched butterfly tried with its whole trembling body to unfold them. Bending over it, I tried to help it with my breath, in vain.

It needed to be hatched out patiently and the unfolding of the wings should be a gradual process in the sun. Now it was too late. My breath had forced the butterfly to appear all crumpled, before its time. It struggled desperately and, a few seconds later, died in the palm of my hand.

That little body is, I do believe, the greatest weight I have on my conscience. For I realize today that it is a mortal sin to violate the great laws of nature. We should not hurry, we should not be impatient, but we should confidently obey the eternal rhythm.

From: Zorba the Greek
by Kazantzakis